

QC 471-05 Bay East Development Corp.
Site Plan 04-05-07-0005

MSA-S-1829-5118

Martin O'Malley
Governor

Anthony G. Brown
Lt. Governor



Margaret G. McHale
Chair

Ren Serey
Executive Director

**STATE OF MARYLAND
CRITICAL AREA COMMISSION
CHESAPEAKE AND ATLANTIC COASTAL BAYS**

1804 West Street, Suite 100, Annapolis, Maryland 21401
(410) 260-3460 Fax: (410) 974-5338
www.dnr.state.md.us/criticalarea/

June 7, 2011

Ms. Sandra N. Carter
Queen Anne's County
Department of Planning and Zoning
160 Coursevall Drive
Centreville, Maryland 21617

Re: File # 04-10-01-0001-C: Revision #3
Bay East Development LLC

Dear Ms. Carter:

Thank you for forwarding the revisions on the above referenced project. It appears that our comments have been satisfied, with the submittal of the Buffer Exemption findings of fact that we had previously requested. It appears that there are no other changes to the plans.

If you have any questions, please contact me at (410) 260-3468.

Sincerely,

A handwritten signature in cursive script, appearing to read "R. Hurley".

Roby Hurley
Natural Resources Planner

RH/jjd

cc: Ms. Holly Tompkins
QC 471-05



*Queen
Anne's
County*

County Commissioners:

Steven J. Arentz, At Large
David L. Dunmyer, District 1
Bob Simmons, District 2
Philip L. Dumenil, District 3
David Olds, District 4

DEPARTMENT OF PLANNING & ZONING

441-05

160 Coursevall Drive
Centreville, MD 21617

Telephone Community Planning: (410) 758-1255
Fax Community Planning: (410) 758-2905
Telephone Land Use: (410) 758-1255
Fax Land Use: (410) 758-2905
Telephone Permits: (410) 758-4088
Fax Permits: (410) 758-3972

DATE: May 31, 2011

TO: Environmental Health
County Roads
Engineering Department
Sanitary District
Volunteer Fire Department
Deputy Fire Marshal
Heritage Coordinator

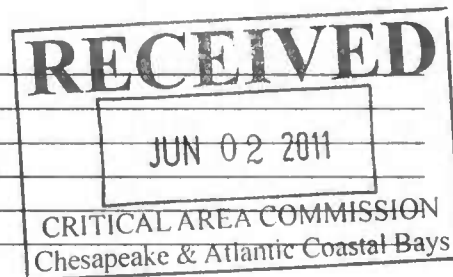
Department of Parks and Recreation
Soil Conservation District
Critical Area Commission
State Highway Administration
Christopher Drummond, Esq.
Department of Planning & Zoning
Bicycle and Pedestrian Advisory Committee

FROM: Planning Department

RE: Major Site Plan
Project description:
File #04-10-01-0001-C Revision # 3
Property Owner of Record: Bay East Development, LLC
Project Name: Bay East Development, LLC

Your comments are due back to the Planning Department **by 12pm on or before June 13, 2011**. Contact Holly A. Tompkins for questions regarding this project. This project is scheduled for STAC on June 15, 2011. Please return to Sandra N. Carter.

Comments:



Recommendation:

_____ Final Site Plan Approval
_____ Resubmit Plan Drawings at Engineering Review
_____ Resubmit Engineering Drawings at Engineering Review
_____ Hold From Planning Commission Agenda
_____ Final Approval with Conditions, as Indicated Below:

REVIEWED BY: _____ DATE: _____



**Queen
Anne's
County**

County Commissioners:

Eric S. Wargotz, M.D., Commission President
Courtney M. Billups, District 1
Paul L. Gunther, District 2
Gene M. Ransom III, District 3
Carol R. Fordonski, District 4

**DEPARTMENT OF LAND USE, GROWTH
MANAGEMENT & ENVIRONMENT**

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Memorandum

Date: July 10, 2009
To: Planning Commission Members
From: J. Steven Cohoon, Chief of Land Use and Zoning

Re: **Buffer Exemption Findings**
Bay East Development Corporation/Beazer Homes

As the Chief of Land Use and Zoning who has been delegated the responsibilities of the Planning Director by the County Commissioners for implementation of the County Code, I make the following conceptual findings that the project as designed meets the requirements of the Buffer Exempt provisions of Title 14, Environmental Protection. In accordance with section 14-1-53.d.1 of Title 14 the Planning Director must document findings that the intrusion into the buffer is the least necessary. The following is a finding of facts confirming that the project at the concept plan level is permitted under the buffer exempt provisions of Title 14 and the intrusion into the buffer is the least necessary considering the history of the site and existing conditions of the area.

Much of the history of the site and the establishment as Buffer Exempt Area relates the use of the property adjacent to Piney Narrows Marina and the location of the property in the Kent Narrows, not just the stand alone character of the property.

1. Due to the configuration of the property with water on three sides viable redevelopment options do not exist without some intrusion into the shore buffer. The intrusion into the buffer is necessary to have viable use of the property.
2. The Waterfront Village Center (WVC) zoning district is described as an area that "is intended to facilitate orderly mixed-use *commercial, light industrial*, marine-oriented, and seafood-industry-oriented *uses* at the Kent Narrows in accordance with the Kent Narrows Master Plan.." The proposed development is in keeping with the purpose of the WVC district and is a permitted use.
3. The definition of Buffer Exempt reads as follows:

"Buffer Exemption Area" (BEA) means specifically designated portions of the critical area Buffer that are exempted from certain requirements for Buffers because the pattern of residential, industrial, commercial, or recreational development present as of December 1, 1985 prevents the Buffer from fulfilling its intended purposes.

The 100 foot shore buffer on site in 1985 had no natural vegetation, use as habitat, or provided any improvements for water quality. The pattern of disturbance on the property included bordering an existing marina on two sides and use for storage which prevented the buffer from fulfilling its intended purpose and therefore the property as well as the adjacent properties throughout the Kent Narrows were designated buffer exempt areas.

The County adopted its Critical Area program and Ordinance in March of 1989. In 1985 the property existed with 2 sides as part of a marina access and marina basin as it is today. The condition of the property as part of a marina basin in 1985 and fronting on the Kent Narrows along with the developed waterfront of the Kent Narrows in the 1980's when the County was adopting Critical Area maps and program provides significant justification for why the property was mapped Buffer Exempt. The waterfront of the Kent Narrows, including this property had minimal vegetation and has not had a functioning buffer.

4. Surrounding water dependant uses in the Kent Narrows such as commercial piers, marinas, travel lifts have no established or functioning buffers.
5. Previous approvals using the BEA status for projects in the Kent Narrows have routinely been held to a 50 foot setback (in some cases less) from tidal waters when placing buildings in the 100 foot shore buffer. Due to the configuration of the property, with water on three sides the proposed development has worked to maintain 50 foot buffers on all three sides concentrating development in the center of the property to minimize intrusion into the shore buffer.
6. In accordance with Title 14 the applicant must provide mitigation for impervious coverage in the 100' shore buffer. The proposed development will be required to enhance the shore buffer between the proposed impervious and the tidal waters with mitigation plantings and landscaping. The applicant is required to provide 2:1 mitigation plantings for the area of new impervious coverage in the shore buffer. With this approval landscaping and plantings will be provided on site resulting in more vegetation within the buffer area after the development than any time since the adoption of County zoning or Critical Area law.
7. The redevelopment of the property does require the installation of stormwater management facilities to improve water quality. This site has never had treated stormwater and the redevelopment of the site will result in improved water quality by adding SWM facilities to the property.
8. To the north and west of the property is a commercial marina bulkheaded on several sides with boat storage and parking up to the waters edge. Existing structures are constructed throughout the buffer and up to and over the waters edge with no vegetation in the shore buffer. The property to the South is the US 50/301 right of way that includes the 6 lane elevated bridge with parking underneath and the County Boat Ramp. This boat ramp and right of way area has no existing buffer area. Any buffer created on this property would not have any reasonable expectation of connection to establish functioning shore buffers in this area. Creating or establishing such an isolated shore buffer in this location would have no ability to provide the water quality and habit benefits that are the goals of Critical Area legislation.

When considering the above findings I have determined that the proposal is a reasonable use of the property with the existing land use designations and historical use of the property and area. Due to the configuration of the land available very limited options exist without intrusion into the shore buffer. The proposed concept plan is a reasonable intrusion into the buffer when considering the development patterns and history of the Kent Narrows.



**Queen
Anne's
County**

**DEPARTMENT OF LAND USE, GROWTH
MANAGEMENT & ENVIRONMENT**

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Memorandum

Date: July 26, 2010
To: Planning Commission Members
From: J. Steven Cohoon, Chief of Land Use and Zoning

**Re: Buffer Exemption Findings
Bay East Development Corporation**

As the Chief of Land Use and Zoning who has been delegated the responsibilities of the Planning Director by the County Commissioners for implementation of the County Code, I make the following findings that the project as designed meets the requirements of the Buffer Exempt provisions of Title 14, Environmental Protection. In accordance with section 14-1-53.d.1 of Title 14 the Planning Director must document findings that the intrusion into the buffer is the least necessary. The following is a finding of facts confirming that the project at the final site plan level is permitted under the buffer exempt provisions of Title 14 and the intrusion into the buffer is the least necessary considering the history of the site and existing conditions of the area.

Much of the history of the site and the establishment as Buffer Exempt Area relates the use of the property adjacent to Piney Narrows Marina and the location of the property in the Kent Narrows, not just the stand alone character of the property.

1. Due to the configuration of the property with water on three sides viable redevelopment options do not exist without some intrusion into the shore buffer. The intrusion into the buffer is necessary to have viable use of the property.
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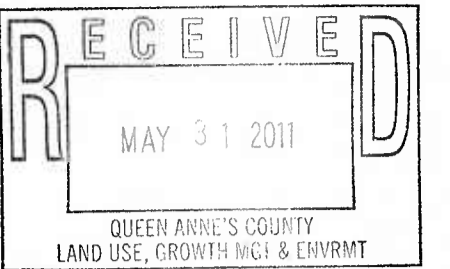
The 100 foot shore buffer on site in 1985 had no natural vegetation, use as habitat, or provided any improvements for water quality. The pattern of disturbance on the property included bordering an existing marina on two sides and use for storage which prevented the buffer from fulfilling its intended purpose and therefore the property as well as the adjacent properties throughout the Kent Narrows were designated buffer exempt areas.

The County adopted its Critical Area program and Ordinance in March of 1989. In 1985 the property existed with 2 sides as part of a marina access and marina basin as it is today. The condition of the property as part of a marina basin in 1985 and fronting on the Kent Narrows along with the developed waterfront of the Kent Narrows in the 1980's when the County was adopting Critical Area maps and program provides significant justification for why the property was mapped Buffer Exempt. The waterfront of the Kent Narrows, including this property had minimal vegetation and has not had a functioning buffer.

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7. The redevelopment of the property does require the installation of stormwater management facilities to improve water quality. This site has never had treated stormwater and the redevelopment of the site will result in improved water quality by adding SWM facilities to the property.
8. To the north and west of the property is a commercial marina bulkheaded on several sides with boat storage and parking up to the waters edge. Existing structures are constructed throughout the buffer and up to and over the waters edge with no vegetation in the shore buffer. The property to the South is the US 50/301 right of way that includes the 6 lane elevated bridge with parking underneath and the County Boat Ramp. This boat ramp and right of way area has no existing buffer area. Any buffer created on this property would not have any reasonable expectation of connection to establish functioning shore buffers in this area. Creating or establishing such an isolated shore buffer in this location would have no ability to provide the water quality and habit benefits that are the goals of Critical Area legislation.

When considering the above findings I have determined that the proposal is a reasonable use of the property with the existing land use designations and historical use of the property and area. Due to the configuration of the land available, very limited options exist without intrusion into the shore buffer. The proposed final site plan is a reasonable intrusion into the buffer when considering the development patterns and history of the Kent Narrows.

CONTRACT DRAWINGS
FOR INFRASTRUCTURE IMPROVEMENTS
PROPOSED MIXED USE DEVELOPMENT
ON THE LANDS OF
BAY EAST DEVELOPMENT CORP.
FOURTH ELECTION DISTRICT, QUEEN ANNE'S COUNTY, MARYLAND
PREPARED FOR : BAY EAST DEVELOPMENT CORP.



NOTES

- PROPERTY LINE AND EXISTING IMPROVEMENTS SHOWN HEREON ARE TAKEN FROM A PLAT ENTITLED "BOUNDARY AND TOPOGRAPHIC SURVEY ON THE LANDS OF BAY EAST DEVELOPMENT CORP." PREPARED BY THE DELMARVA SURVEY COMPANY, DATED SEPTEMBER, 2005.
- FOR DEED REFERENCE, SEE LIBER M.W.M. 229, FOLIO 162.
- CURRENT ZONING CLASSIFICATION IS "WVC" - (WATERFRONT VILLAGE CENTER)
- THE PROPERTY IS ENTIRELY LOCATED WITHIN THE CHESAPEAKE BAY CRITICAL AREA DESIGNATION - IDA AND IS BUFFER EXEMPT. THIS SITE IS AN UNDEVELOPED PARCEL OF LAND LYING ENTIRELY WITHIN THE CHESAPEAKE BAY CRITICAL AREA AND LOCATED NORTH OF THE COUNTY LANDING ON THE EAST END OF PINEY NARROWS SERVICE ROAD.
- SITE IS ENTIRELY LOCATED WITHIN 100 YEAR FLOOD PLAIN AS SCALED FROM FLOOD INSURANCE RATE MAP COMMUNITY PANEL No. 240054 0046 C. DATED JULY 3, 1986.
- THE SOIL TYPE "Hq" (HONGA PEAT) IS FOUND ON THE SITE AS SCALED FROM 1994-1995 SOILS SURVEY MAPS No. 31 & 32 OF QUEEN ANNE'S COUNTY.
- PUBLIC SEWER WILL BE UTILIZED FOR SEWAGE DISPOSAL AND PUBLIC WATER WILL BE UTILIZED FOR POTABLE WATER SUPPLY.
- NONTIDAL WETLANDS ARE NOT PRESENT ON THE SITE ACCORDING TO A JURISDICTIONAL DETERMINATION BY THE U.S. ARMY CORPS OF ENGINEERS, DATED OCTOBER 22, 2003.
- THIS PLAN IS EXEMPT FROM TITLE 18, SUBTITLE 2 OF THE COUNTY CODE OF QUEEN ANNE'S COUNTY, BECAUSE IT IS AN AREA GOVERNED BY THE CHESAPEAKE BAY CRITICAL AREA PROTECTION LAWS, TITLE 8, SUBTITLE 18 OF THE NATURAL RESOURCES ARTICLE, ANNOTATED CODE OF MARYLAND. SEE SECTION 18:2-4(b)(2).
- THE PROJECT HAS RECEIVED APFS APPROVAL IN ACCORDANCE WITH A LETTER FROM THE TRC, DATED MAY 25, 2011.
- SITE REQUIREMENTS:
RESIDENTIAL:
BUILDING SETBACKS (REQUIRED):
FRONT = 25'
REAR = 25'
SIDE = 15'
MAXIMUM BUILDING HEIGHT:
PRINCIPAL = 45' (ALLOWED)
PRINCIPAL = 45' (PROPOSED)
COMMERCIAL:
BUILDING SETBACKS (REQUIRED):
FRONT = 25'
REAR = 10'
SIDE = 10'
MAXIMUM BUILDING HEIGHT:
PRINCIPAL = 45' (ALLOWED)
PRINCIPAL = 45' (PROPOSED)

SITE STATISTICS

CURRENT USE - VACANT	
PROPOSED USE - RESIDENTIAL TOWNHOUSES AND FIRST FLOOR COMMERCIAL BUILDINGS WITH RESIDENTIAL UNITS ABOVE. THE RESIDENTIAL UNITS ARE CONSIDERED MULTIPLEX RESIDENTIAL UNITS AND ARE TO CONFORM TO SECTION 18:1-36 OF THE COUNTY CODE.	
GROSS SITE AREA	= 7.934 ac.±
AREA IN TIDAL WATERS	= 1.697 ac.±
BASE SITE AREA	= 6.237 ac.±
CRITICAL AREA (IDA)	= 7.934 ac.±
AREA IN BUFFERVARD	= 0.143 ac.±
AREA WITHIN 100 Yr. FLOOD PLAIN	= 6.238 ac.±
AREA WITHIN RESOURCE PROTECTION	= 1.588 ac.±
No. OF DWELLING UNITS (PERMITTED)	= 50 du's (8 du's/acre)
No. OF DWELLING UNITS (PROPOSED)	= 49 du's
MINIMUM OPEN SPACE (REQUIRED)	= 1.877 ac.± (30%)
OPEN SPACE (PROPOSED) (DEED RESTRICTED)	= 1.877 ac.± (30%)
IMPERVIOUS AREA (ALLOWED)	= 4.366 ac.± (70%)
IMPERVIOUS AREA (EXISTING)	= 0.733 ac.±
IMPERVIOUS AREA TO BE REMOVED (EXISTING)	= 0.733 ac.±
IMPERVIOUS AREA (PROPOSED)	= 3.256 ac.±
IMPERVIOUS AREA (TOTAL)	= 3.256 ac.± (52.2%)
LANDSCAPE AREA (REQUIRED)	= 1.877 ac.± (30%)
LANDSCAPE AREA (EXISTING)	= 5.525 ac.±
LANDSCAPE AREA (PROPOSED)	= 2.981 ac.± (47.8%)

SITE STATISTICS - NON RESIDENTIAL

GROSS SITE AREA	= 7.934 AC.±
AREA TO SUPPORT THE RESIDENTIAL COMPONENT	= 6.125 AC.±
AREA FOR COMMERCIAL DENSITY DETERMINATION	= 1.809 AC.±
BASE SITE AREA	= 1.809 AC.±
FLOOR AREA (ALLOWED) (30% FAR):	= 0.543 AC.± (23,640 sq. ft.±)
FLOOR AREA (EXISTING)	= 0.000 AC.±
FLOOR AREA (TO BE REMOVED)	= 0.000 AC.±
FLOOR AREA (PROPOSED)	= 0.300 AC.± (13,056 sq. ft.±)
FLOOR AREA (TOTAL)	= 0.300 AC.± (13,056 sq. ft.±)

NOTE: THERE IS NO MAXIMUM IMPERVIOUS AREA LIMITATION OR REQUIRED LANDSCAPED AREA IN THE WVC DISTRICT FOR COMMERCIAL DEVELOPMENTS. LANDSCAPED/OPEN SPACE AREA REQUIREMENTS ARE MET BY THE RESIDENTIAL DENSITY REQUIREMENTS AS INDICATED ABOVE.

PARKING CALCULATIONS

PER SECTION 18:1-36.6.6.7 OF THE COUNTY CODE:

RESIDENTIAL:
2.0 spaces/unit X 41 UNITS = 82 SPACES
PARKING (REQUIRED) = 82 SPACES
PARKING (PROPOSED) = 82 SPACES (GARAGES)
27 - ADDITIONAL GUEST PARKING SPACES
*** TOTAL NUMBER OF RESIDENTIAL UNITS DOES NOT INCLUDE UNITS ABOVE THE COMMERCIAL BUILDINGS ***

PER SECTIONS 18:1-83(c)(1)(a)(b) & 18:1-83 (c)(2) OF THE COUNTY CODE:

COMMERCIAL BUILDING #1:
1 space/200 sq. ft. (COFFEE SHOP) X 1,500 sq. ft. = 8 SPACES
1 space/employee X 4 EMPLOYEES = 4 SPACES
1 space/350 sq. ft. (RETAIL) X 2,852 sq. ft. = 8 SPACES

PARKING (REQUIRED) = 20 SPACES

MIXED USE BUILDINGS #2 & #3:
FIRST FLOOR COMMERCIAL
1 space/350 sq. ft. (RETAIL) X 2,432 sq. ft. = 7 SPACES
1 space/250 sq. ft. (OFFICE) X 2,432 sq. ft. = 10 SPACES

PARKING (REQUIRED) = 17 SPACES

RESIDENTIAL:
2.0 spaces/unit X 8 UNITS = 16 SPACES

TOTAL PARKING (REQUIRED) = 53 SPACES
PARKING (PROPOSED) = 31 SPACES (PARKING LOT)
PARKING (PROPOSED) = 16 SPACES (DRIVES)
PARKING (PROPOSED) = 16 SPACES (GARAGES)
TOTAL PARKING (PROVIDED) = 63 SPACES

BOAT SLIP CALCULATIONS

PER SECTIONS 14:1-43 & 18:1-43 OF THE COUNTY CODE:

(a) 1 slip/50 ft of shoreline X 1,450 ft = 29 SLIPS

OR

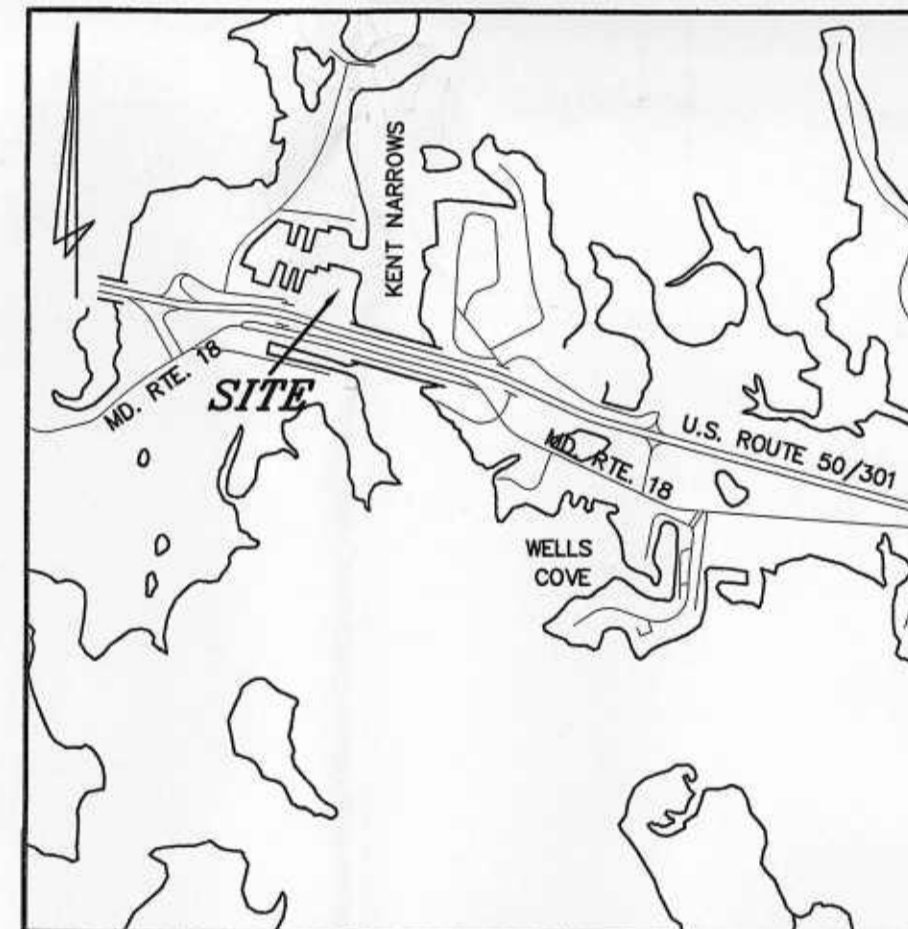
(b) 1 slip/50% units X 49 units = 24 SLIPS

OR

30 slips for number of units from 41 to 100 units = 30 SLIPS

BOAT SLIPS (ALLOWED) = 25 SLIPS

BOAT SLIPS (PROPOSED) = 25 SLIPS



VICINITY MAP

SCALE 1" = 200'

TABLE OF CONTENTS

SHEET C-1	TITLE SHEET
SHEET C-2	EXISTING CONDITIONS/DEMOLITION PLAN
SHEET C-3	OVERALL SITE PLAN
SHEETS C-4	ROAD AND ENTRANCE IMPROVEMENTS PLAN
SHEETS C-5 & C-6	DETAILED SITE PLANS
SHEETS C-7 & C-8	SITE, GRADING AND STORMWATER MANAGEMENT PLANS
SHEETS C-9 & C-10	SEDIMENT AND EROSION CONTROL PLANS
SHEETS C-11 thru C-14	STORMDRAIN PROFILES AND SECTIONS
SHEET C-15	OVERALL UTILITY PLAN
SHEETS C-16 thru C-33	SEWER AND WATER PLANS AND PROFILES
SHEETS C-34 thru C-36	DETAIL SHEETS

STATEMENT OF PURPOSE AND INTENT

A PROPOSED OPEN MARKET MULTIPLEX PLANNED DEVELOPMENT IS PROPOSED ON THIS SITE AND CONSISTS OF 31 UNITS IN A TOWNHOUSE STYLE CONDOMINIUM REGIME 10 CONDOMINIUM UNITS, A 4,352 sq. ft.± COMMERCIAL BUILDING AS WELL AS 8 COMMERCIAL UNITS WITH RESIDENCES ABOVE. AS A CONDOMINIUM REGIME, ALL UNIT OWNERS WILL SHARE THE USE AND OWNERSHIP OF THE PARKING AREAS, WALKS, DRIVES, etc. EACH TOWNHOUSE WILL HAVE A TWO-CAR GARAGE. A 29 SLIP COMMUNITY MARINA WILL ALSO BE PROPOSED.

THE PURPOSE OF THIS SITE PLAN IS TO OBTAIN APPROVAL FROM THE QUEEN ANNE'S COUNTY PLANNING COMMISSION FOR THE PROPOSED DEVELOPMENT OF THIS SITE.

OWNER/DEVELOPER

BAY EAST DEVELOPMENT CORP.
A DIVISION OF ATLANTIC DEVELOPMENT
CORP. OF PENNSYLVANIA
C/O ROBERT CADWELL
1445 N. ROCK ROAD
SUITE 200
WICHITA, KANSAS 67206-1292
PHONE NO. 1-316-507-2133

ENGINEER

DMS & ASSOCIATES, LLC
P.O. BOX 80
CENTREVILLE, MARYLAND 21617
PHONE NO. 1-443-262-9130

CERTIFICATION BY THE DEPARTMENT OF LAND USE, GROWTH MANAGEMENT AND ENVIRONMENT

THIS IS TO CERTIFY THAT THIS MAJOR SITE PLAN #01-10-01-0001-C, IS APPROVED BY THE DEPARTMENT OF LAND USE, GROWTH MANAGEMENT AND ENVIRONMENT THIS DAY OF MAY, 2010.

J. STEVEN COHOON, CHIEF OF LAND USE AND ZONING

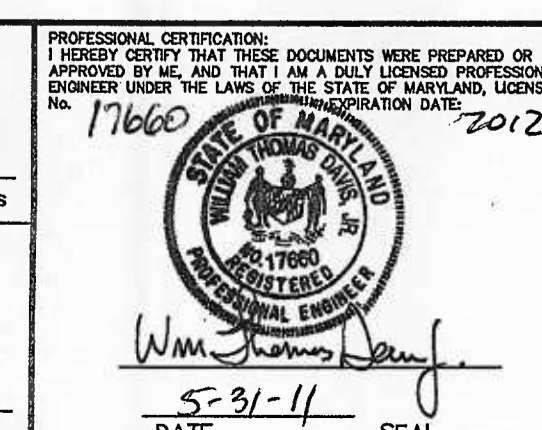
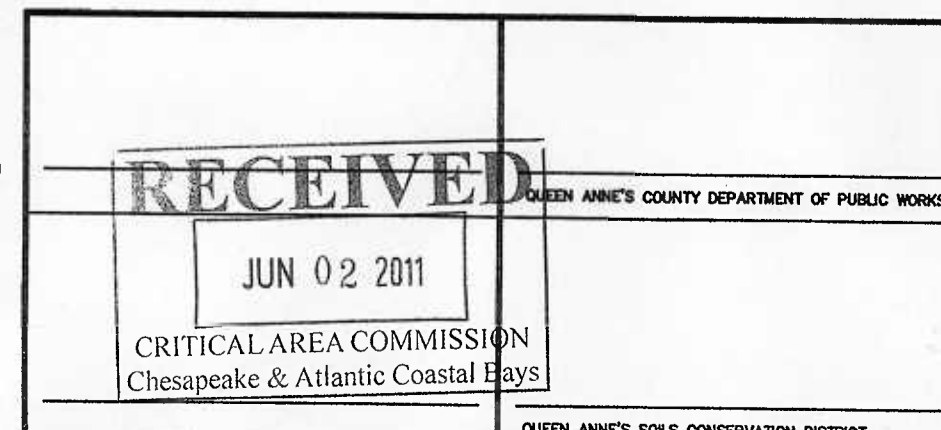
BASE SITE AREA			
GROSS SITE AREA	=	7.934	acres
NON-CONTIGUOUS LAND	=	0.000	acres
LAND IN TIDAL WATER	=	1.697	acres
BASE SITE AREA	=	6.237	acres
RESOURCE PROTECTION LAND			
RESOURCE	OPEN SPACE RATIO	RESOURCE LAND	RESOURCE PROTECTION LAND
NONTIDAL WETLANDS	1.00	0.000 acres	0.000 acres
50' SHORE BUFFER	1.00	1.588 acres	1.588 acres
MATURE HARDWOODS	0.80	0.000 acres	0.000 acres
TOTAL LAND IN RESOURCE		1.588 acres	
TOTAL RESOURCE PROTECTION LAND			1.588 acres

IMPERVIOUS SURFACE IN THE BUFFER EXEMPTION AREA

TOTAL SITE AREA	= 6.237 AC.±
TOTAL AREA WITHIN THE 300' SHORE BUFFER:	= 6.235 AC.±
TOTAL AREA WITHIN THE 0'-100' CRITICAL AREA BUFFER	= 3.099 AC.±
TOTAL EXISTING IMPERVIOUS SURFACE IN THE 0'-100' CRITICAL AREA BUFFER	= 0.238 AC.±
EXISTING IMPERVIOUS SURFACE IN THE 0'-100' CRITICAL AREA BUFFER TO BE REMOVED	= 0.238 AC.±
TOTAL PROPOSED IMPERVIOUS SURFACE IN THE 0'-100' CRITICAL AREA BUFFER	= 0.815 AC.±
NET INCREASE OF IMPERVIOUS SURFACE IN THE 0'-100' CRITICAL AREA BUFFER	= 0.577 AC.±
TOTAL AREA WITHIN THE 0'-50' CRITICAL AREA BUFFER (BUFFER EXEMPT AREA)	= 1.628 AC.±
TOTAL EXISTING IMPERVIOUS SURFACE IN THE 0'-50' CRITICAL AREA BUFFER	= 0.004 AC.±
EXISTING IMPERVIOUS SURFACE IN THE 0'-50' CRITICAL AREA BUFFER TO BE REMOVED	= 0.004 AC.±
TOTAL IMPERVIOUS PROPOSED WITHIN THE 0'-50' CRITICAL AREA BUFFER	= 0.164 AC.±
TOTAL PROPOSED & EXISTING IMPERVIOUS SURFACE IN THE 0'-50' CRITICAL AREA BUFFER	= 0.164 AC.±
NET INCREASE OF IMPERVIOUS SURFACE IN THE 0'-50' CRITICAL AREA BUFFER	= 0.160 AC.±

BUFFER EXEMPTION AREA MITIGATION

NET INCREASE OF IMPERVIOUS SURFACE IN THE 0'-100' CRITICAL AREA BUFFER	= 0.577 AC.±
NET INCREASE OF IMPERVIOUS SURFACE IN THE 50'-100' CRITICAL AREA BUFFER	= 0.417 AC.±
REQUIRED BUFFER EXEMPTION AREA MITIGATION (2:1 RATIO) =	= 0.834 AC.±
AREA ON SITE PROVIDED FOR MITIGATION OF INCREASE OF IMPERVIOUS SURFACE WITHIN THE 100' CRITICAL AREA BUFFER	= 58
TOTAL NUMBER OF 4'-6" CONTAINER GROWN TREES REQUIRED TO BE PLANTED (70'-4'-6" CONTAINER GROWN TREES REQUIRED TO BE PLANTED PER ACRE OF REQUIRED BUFFER EXEMPTION MITIGATION AREA)	= 58
NET INCREASE OF IMPERVIOUS SURFACE IN THE 0'-50' CRITICAL AREA BUFFER	= 0.160 AC.±
REQUIRED BUFFER EXEMPTION AREA MITIGATION (3:1 RATIO) =	= 0.480 AC.±
AREA ON SITE PROVIDED FOR MITIGATION OF INCREASE OF IMPERVIOUS SURFACE WITHIN THE 100' CRITICAL AREA BUFFER	= 34
TOTAL NUMBER OF 4'-6" CONTAINER GROWN TREES REQUIRED TO BE PLANTED (70'-4'-6" CONTAINER GROWN TREES REQUIRED TO BE PLANTED PER ACRE OF REQUIRED BUFFER EXEMPTION MITIGATION AREA)	= 34
TOTAL NUMBER OF 4'-6" CONTAINER GROWN TREES REQUIRED TO BE PLANTED IN THE 0'-50' CRITICAL AREA BUFFER	= 92



DAVIS, MOORE, SHEARON & ASSOCIATES, LLC
ENGINEERING, DRAFTING/DESIGN, ENVIRONMENTAL SERVICES & SURVEYING
P.O. BOX 80
CENTREVILLE, MARYLAND 21617
PHONE : 1-443-262-9130
FAX : 1-443-262-9148

DATE	REVISION
4-26-10	PER COMMENTS
5-21-10	PER COMMENTS
6-18-10	PER COMMENTS
5-26-11	OPEN MARKET

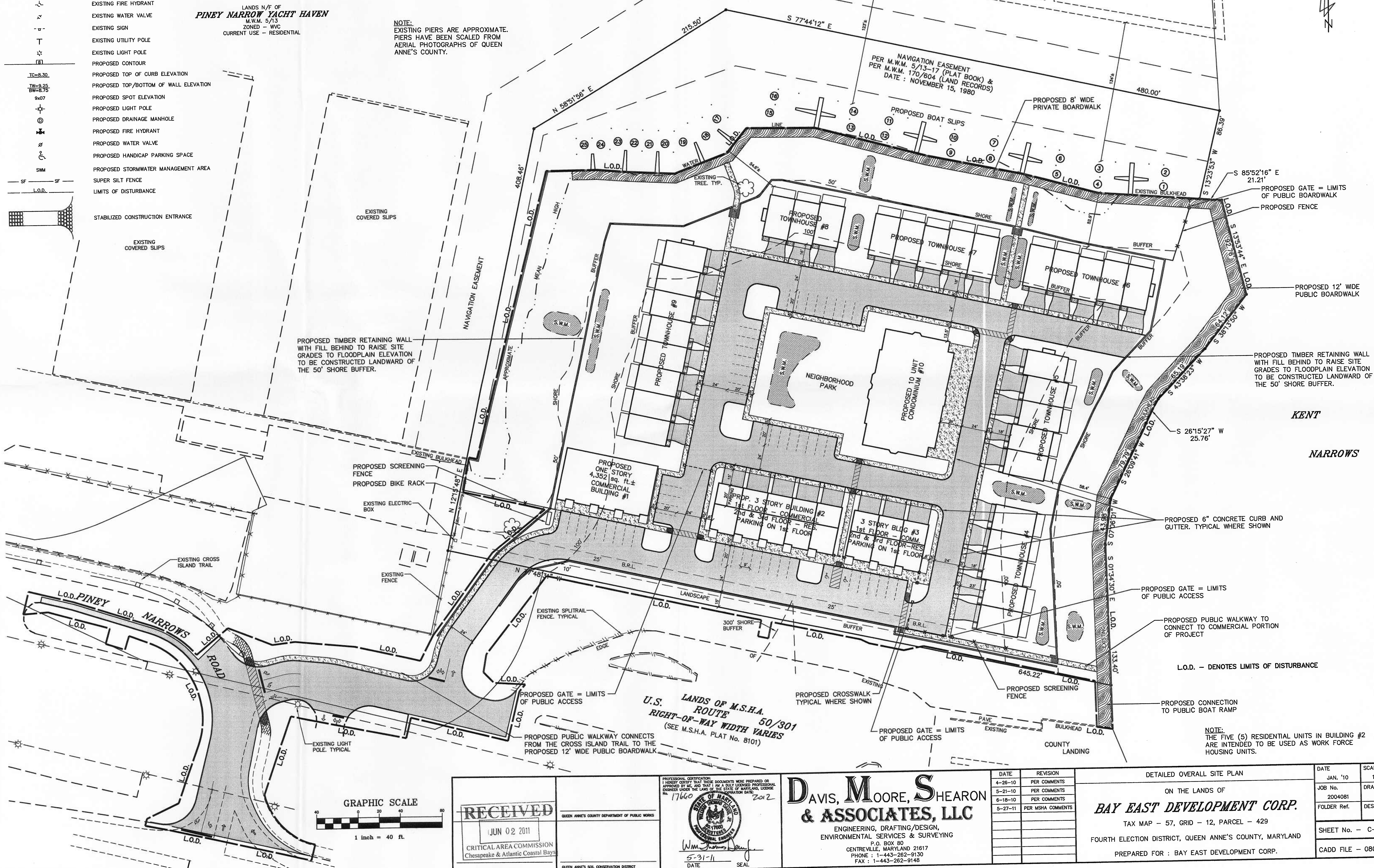
TITLE SHEET		DATE	SCALE
ON THE LANDS OF		JAN. '10	AS SHOWN
BAY EAST DEVELOPMENT CORP.		JOB No.	DRAWN BY
TAX MAP - 57, GRID - 12, PARCEL - 429		2004081	WJM
FOURTH ELECTION DISTRICT, QUEEN ANNE'S COUNTY, MARYLAND		FOLDER Ref.	DESIGNED BY
PREPARED FOR : BAY EAST DEVELOPMENT CORP.			WTD, Jr.
		SHEET No. - C-1	
		CADD FILE - 08076C01rev	

LEGEND

- EXISTING SPOT ELEVATION
- EXISTING CONTOUR
- EXISTING TREE
- EXISTING WELL
- EXISTING SEWER MANHOLE
- EXISTING FIRE HYDRANT
- EXISTING WATER VALVE
- EXISTING SIGN
- EXISTING UTILITY POLE
- EXISTING LIGHT POLE
- PROPOSED CONTOUR
- PROPOSED TOP OF CURB ELEVATION
- PROPOSED TOP/BOTTOM OF WALL ELEVATION
- PROPOSED SPOT ELEVATION
- PROPOSED LIGHT POLE
- PROPOSED DRAINAGE MANHOLE
- PROPOSED FIRE HYDRANT
- PROPOSED WATER VALVE
- PROPOSED HANDICAP PARKING SPACE
- PROPOSED STORMWATER MANAGEMENT AREA
- SUPER SILT FENCE
- LIMITS OF DISTURBANCE
- STABILIZED CONSTRUCTION ENTRANCE
- EXISTING COVERED SLIPS

LANDS N/F OF
PINEY NARROW YACHT HAVEN
M.W.M. 5/13
ZONED - WVC
CURRENT USE - RESIDENTIAL

NOTE:
EXISTING PIERS ARE APPROXIMATE.
PIERS HAVE BEEN SCALED FROM
AERIAL PHOTOGRAPHS OF QUEEN
ANNE'S COUNTY.



RECEIVED
JUN 02 2011
CRITICAL AREA COMMISSION
Chesapeake & Atlantic Coastal Bays

QUEEN ANNE'S COUNTY DEPARTMENT OF PUBLIC WORKS

PROFESSIONAL CERTIFICATION:
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR
APPROVED BY ME, AND THAT I AM A FULLY LICENSED PROFESSIONAL
ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE
No. 17660
DATE: 5-31-11
SEAL

**DAVIS, MOORE, SHEARON
& ASSOCIATES, LLC**
ENGINEERING, DRAFTING/DESIGN,
ENVIRONMENTAL SERVICES & SURVEYING
P.O. BOX 80
CENTREVILLE, MARYLAND 21617
PHONE : 1-443-262-9130
FAX : 1-443-262-9148

DATE	REVISION
4-26-10	PER COMMENTS
5-21-10	PER COMMENTS
6-18-10	PER COMMENTS
5-27-11	PER MSHA COMMENTS

DETAILED OVERALL SITE PLAN
ON THE LANDS OF
BAY EAST DEVELOPMENT CORP.
TAX MAP - 57, GRID - 12, PARCEL - 429
FOURTH ELECTION DISTRICT, QUEEN ANNE'S COUNTY, MARYLAND
PREPARED FOR : BAY EAST DEVELOPMENT CORP.

DATE	SCALE
JAN. '10	1" = 40'
JOB No. 2004081	DRAWN BY W.M.
FOLDER Ref.	DESIGNED BY WTD, Jr.
SHEET No. - C-3	
CADD FILE - 08076C03	

Martin O'Malley
Governor

Anthony G. Brown
Lt. Governor



Margaret G. McHale
Chair

Ren Serey
Executive Director

**STATE OF MARYLAND
CRITICAL AREA COMMISSION
CHESAPEAKE AND ATLANTIC COASTAL BAYS**

1804 West Street, Suite 100, Annapolis, Maryland 21401
(410) 260-3460 Fax: (410) 974-5338
www.dnr.state.md.us/criticalarea/

July 31, 2009

Mr. Frank Hall
Queen Anne's County
Department of Land Use, Growth Management
and Environment
160 Coursevall Drive
Centreville, MD 21617

Re: Bay East Development Corporation
#CP #04-05-07-0005-C

Dear Mr. Hall:

Thank you for forwarding a copy of the Buffer Exemption Area findings from the Planning Director in regards to the above referenced project. These findings are required per Section 14:1-53.D.1 of the County Code. Based on these findings, the Planning Director determined that the proposed redevelopment in the Buffer may be permitted because there is no feasible alternative. Further, the findings conclude that the intrusion into the Buffer is the least necessary. This office concurs that the proposed redevelopment plan meets these two standards. Please note, the remaining comments (#2 - #6) outlined in my letter from April 14, 2009 should be addressed in the next site plan submittal.

Thank you for the opportunity to review the BEA findings. If you have any additional questions please contact me at 410-260-3475.

Sincerely,

A handwritten signature in cursive script that reads "Kate Charbonneau".

Kate Charbonneau
Regional Program Chief
QC471-05

Ms. Sandra Carter

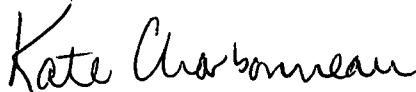
January 19, 2010

Page 2 of 2

- c. It is not clear from the impervious surface table whether the 0.815 acres includes the 0.164 acres of impervious surface in the 0-50' setback. If it does, it would be acceptable to reduce the 2:1 mitigation requirement from 1.63 acres (0.815×2) to 1.32 acres (0.651×2).
3. I will provide comment on the stormwater management plan and 10% pollutant reduction comments by January 27th. They are currently under review by our stormwater engineer, Mr. Tom Schueler.

Thank you for the opportunity to provide comments on this development proposal. Along with the requested findings, please provide a revised site plan which addresses the comments above. If you have any additional questions please contact me at 410-260-3475.

Sincerely,



Kate Charbonneau
Regional Program Chief
QC471-05

Martin O'Malley
Governor

Anthony G. Brown
Lt. Governor



Margaret G. McHale
Chair

Ren Serey
Executive Director

**STATE OF MARYLAND
CRITICAL AREA COMMISSION
CHESAPEAKE AND ATLANTIC COASTAL BAYS**

1804 West Street, Suite 100, Annapolis, Maryland 21401

(410) 260-3460 Fax: (410) 974-5338

www.dnr.state.md.us/criticalarea/

July 27, 2010

Ms. Barbara Norrington
Queen Anne's County
Department of Land Use, Growth Management
and Environment
160 Coursevall Drive
Centreville, Maryland 21617

Re: File # 04-10-01-0001-C: Revision #2
Bay East Development Corporation

Dear Ms. Norrington:

Thank you for forwarding the revisions on the above referenced project. It appears that our comments have been satisfied, with the exception of one: The findings of fact we have requested are still outstanding. Please forward the revised findings from the Planning Director regarding the redevelopment in the Buffer Exemption Area (BEA) per Section 14:1-53.D.1.

If you have any questions, please contact me at (410) 260-3476.

Sincerely,

A handwritten signature in black ink, appearing to read "Julie Roberts", followed by a long horizontal line.

Julie Roberts
Natural Resources Planner

QC 471-05

TTY for the Deaf

Annapolis: (410) 974-2609 D.C. Metro: (301) 586-0450

Martin O'Malley
Governor

Anthony G. Brown
Lt. Governor



Margaret G. McHale
Chair

Ren Serey
Executive Director

**STATE OF MARYLAND
CRITICAL AREA COMMISSION
CHESAPEAKE AND ATLANTIC COASTAL BAYS**

1804 West Street, Suite 100, Annapolis, Maryland 21401
(410) 260-3460 Fax: (410) 974-5338
www.dnr.state.md.us/criticalarea/

May 6, 2010

Ms. Sandra Carter
Queen Anne's County
Department of Land Use, Growth Management
and Environment
160 Coursevall Drive
Centreville, MD 21617

Re: Bay East Development Corporation
MISP #04-10-01-0001-C

Dear Ms. Carter:

Thank you for forwarding the above referenced major site plan for review and comment. I last provided comments by letter on January 19, 2010 and by email correspondence with DMS & Associates. The revised plan addresses all previous comments related to the 10% pollutant reduction requirement. I have no further comments at this time.

Please forward a copy of the revised findings from the Planning Director regarding the redevelopment in the Buffer Exemption Area (BEA) per Section 14:1-53.D.1. Please provide confirmation that the County does not intend to require mitigation for the impacts to the Buffer per Section 14:1-53.E.1.b.

Thank you for the opportunity to provide comments on this development proposal. If you have any additional questions please contact me at 410-260-3475.

Sincerely,

A handwritten signature in cursive script that reads "Kate Charbonneau".

Kate Charbonneau
Regional Program Chief
QC471-05

Cc: Mr. Frank Hall

QUEEN ANNE'S COUNTY
Department of Land Use, Growth Management & Environment
 160 Coursevall Drive
 Centerville, MD 21617
 (410) 758-1255

Submittal Date: May 31 2011

APPLICATION DISTRIBUTION SHEET FOR
MAJOR SITE PLANS

Project Name: BAY EAST - AMENDMENT

Project No.: _____

County Departments

(Departments if Applicable)

Items Distributed

Application Form
 Cover Letter Describing Project
 Plans/Plats (must fit in 12"x15" envelope)
 Deed to Property
 Base Site Area Calculations
 Natural Resource Calculations
 Site Capacity Calculations
 Critical Area Env. Assessment
 Sediment/Erosion Control Plan
 DPW Stormwater Checklist
 Stormwater Calculations
 Stormwater Management Plans
 Elevations
 Color Renderings
 Road Improvement Plans
 Sanitary Sewer Plans
 Private Road Covenants/Maint.
 Open Space Covenants
 TDR Lifting Instrument
 TDR Setting Down Instrument
 Non-Contiguous Dev. Calcs.
 Non-Contiguous Parcel Plats
 Landscaping and Lighting Plans
 Forest Conservation Worksheet
 Forest Stand Delineation
 Forest Conservation Plan
 Utility Letters (electric, telephone)
 Other Items: _____

Environmental Health	Local Vol. Fire Dept.	Parks and Rec	LGE ***	Public Works/Engineering	County Roads	Sanitary District	Fire Marshal	Soil Conservation	State Highway Admin.	Heritage Coordinator	Board of Education (if PFIA ** is submitted)	Critical Area (if in Critical Area)	C. Drummond, Esq. (if legal review required)	Finance (if PFIA ** is submitted)	Traffic Consultant (if a study is completed)	911 Addressing (if New Road is Proposed)	Total Copies Required	For Office Use Only
1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	18	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	17	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	17	
			1										1				2	
			1														1	
			1														1	
			1									1					2	
			1					1									2	
			1	1	1										1		4	
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			1	1	1							1			1		5	
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Planned Development Items																		
			2								1			1			4	
			1	1	1				4						1		8	
			1														1	
			1									1					2	

* FAA & MAA Approval - Projects near existing Airports may require additional review by MAA & FAA.

Please contact these Agencies or the Bay Bridge Airport Manager for additional information.

** PFIA - Public Facility Impact Assessment

*** One additional copy may be required for Community Planning if project is located within a Planned Development Zoning District or Incorporated Town.



Davis, Moore, Shearon & Associates, LLC

May 31, 2011

Steve Cohoon, Director
Queen Anne's County
Department of Planning & Zoning
160 Coursevall Drive
Centreville, MD 21617

**RE: REQUEST FOR AMENDMENT TO THE CONDITIONALLY APPROVED
SITE PLAN FOR PROPOSED MIXED USE DEVELOPMENT, LANDS OF BAY
EAST DEVELOPMENT CORPORATION, LOCATED KENT NARROWS, DMS
& ASSOCIATES JOB #2008076**

Dear Steve:

As you may be aware we have received approval of an Adequate Public Facilities Study (APFS) to change the residential units from age restricted to open market units. This change only affects notes on the title sheet of the approved plans. During the APFS review MSHA requested minor revisions to improvements shown on sheet 4 of our plans. The revisions have been made as requested and have been incorporated into the overall plan as well as sheet 4.

We attach 15 sets of the Title Sheet, the Overall Site Plan and Sheet 4 and ask that the request to amend the conditionally approved site be reviewed at the June 15, 2011 STAC meeting with the goal of reviewing the project with the Planning Commission at the July meeting.

If you should have questions or need additional information please do not hesitate to call me at 443-262-9130

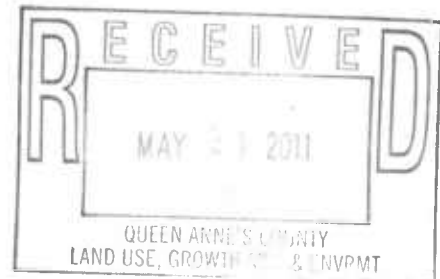
Sincerely,

DMS & Associates, LLC

A handwritten signature in dark ink, appearing to read "Wm Thomas Davis, Jr.", is written over the printed name.

Wm Thomas Davis, Jr. PE

Pc: George Rathlev



Martin O'Malley
Governor

Anthony G. Brown
Lt. Governor



Margaret G. McHale
Chair

Ren Serey
Executive Director

**STATE OF MARYLAND
CRITICAL AREA COMMISSION
CHESAPEAKE AND ATLANTIC COASTAL BAYS**

1804 West Street, Suite 100, Annapolis, Maryland 21401
(410) 260-3460 Fax: (410) 974-5338
www.dnr.state.md.us/criticalarea/

January 19, 2010

Ms. Sandra Carter
Queen Anne's County
Department of Land Use, Growth Management
and Environment
160 Coursevall Drive
Centreville, MD 21617

Re: Bay East Development Corporation
MISP #04-10-01-0001-C

Dear Ms. Carter:

Thank you for forwarding the above referenced major site plan for review and comment. I last provided comments on a Concept Plan on April 14, 2009. Based on the information submitted I have the following remaining comments:

1. Please forward a copy of the revised findings from the Planning Director regarding the redevelopment in the Buffer Exemption Area (BEA) per Section 14:1-53.D.1.
2. As I have previously commented, Section 14:1-53E.1.a requires the extent of the parcel shoreward of the development (50-foot setback) to be established in natural vegetation. Further, Section 14:1-53.E.1.b states that any redevelopment in the BEA shall be mitigated by providing natural vegetation an area twice the extent of the impervious surface area created. The BEA Mitigation calculations should be revised as follows:
 - a. The area of the 0'-50' setback is 1.628 acres and must be fully established. The 3:1 mitigation for the boardwalk and access paths within the setback (totaling 0.48 acres) may be used to meet this establishment.
 - b. The redevelopment on site in the 100' Buffer totals 0.815 acres. This provision was not intended to capture the only the net increase in coverage in the Buffer when a site is proposed for complete redevelopment. Therefore, an additional 1.63 acres of mitigation is required.

Martin O'Malley
Governor

Anthony G. Brown
Lt. Governor



Margaret G. McHale
Chair

Ren Serey
Executive Director

**STATE OF MARYLAND
CRITICAL AREA COMMISSION
CHESAPEAKE AND ATLANTIC COASTAL BAYS**

1804 West Street, Suite 100, Annapolis, Maryland 21401
(410) 260-3460 Fax: (410) 974-5338
www.dnr.state.md.us/criticalarea/

April 14, 2009

Mr. Frank Hall
Queen Anne's County
Department of Land Use, Growth Management
and Environment
160 Coursevall Drive
Centreville, MD 21617

Re: Bay East Development Corporation
#CP #04-05-07-0005-C

Dear Mr. Hall:

Thank you for providing revised plans for the above referenced project. The site is located within the Intensely Development Area (IDA) and is within a Buffer Exempt Area (BEA). On April 3, 2009, we received a revised site plan and a letter of response from Mr. Thomas Davis of DMS. The following comments apply to the revised site plan and response letter.

1. §14:1-53.D.1 states that redevelopment activities, including structures, roads, parking areas, and other impervious surfaces will not be permitted in the BEA unless the applicant can demonstrate and the Planning Director finds that there is no feasible alternative. The Code also states that a copy of the Planning Director's findings shall be available to the Critical Area Commission upon request. As there are structures, parking areas, and other impervious surface areas within the BEA, please consider this a formal request for a copy of the Planning Director's findings in this regard.
2. §14:1-53E.1.a states that the extent of the lot or parcel shoreward of the development shall be required to be established in natural vegetation on the site. §14:1-53.E.1.b states that any redevelopment in the BEA shall be mitigated by providing natural vegetation an area twice the extent of the impervious surface area created and that the mitigation must be created on the property or in another location approved by the Planning Director. While Mr. Davis states that just planting of the setback area even if it does not meet the minimum 2:1 mitigation required under §14:1-53.E.1.b, we are unable to find this exemption detailed in the County Code. Rather, the Code appears to expressly require mitigation for all impervious surfaces created in relation to redevelopment in the BEA in

order to benefit wildlife habitat, water quality improvement, and environmental education within the Critical Area. The planting plan submitted only provides 1.48 acres of mitigation. Please provide the citation in the County Code where an exemption to this requirement is permitted or provide a site plan detailing the 2.23 acres of mitigation plantings required (based on the applicant's proposed impervious surface area stated on the site plan).

3. In order to evaluate whether the proposed 10% pollutant reduction plan is feasible, please have the applicant provide the following:
 - a. A post-development drainage area map;
 - b. Typical of the proposed best management practices, including each type of sand filter;
 - c. A breakout by each BMP type of the percentage of drainage area going to that type, this should also include an analysis of BMP sizing for stormwater quantity;
 - d. A showing that 100% of the site area will drain to the wet ponds. This appears to be impossible as some areas of the setback look to be at a lower elevation.
4. In addition to the above, we recommend the County request a maintenance plan from the applicant to demonstrate how the facilities, particularly the Type I sand filters will be maintained. If the community does not intend to maintain the facilities, please provide information describing how the facilities will be maintained by the County.
5. In regards to the west side of the property, how will the shoreline be maintained? The site plan does not indicate an existing bulkhead. Is a bulkhead proposed for this area? If not, is there another measure proposed?
6. Also on the west side of the property, the site plan shows a wet pond located just behind a timber retaining wall which is proposed in order to elevate the property. Will the applicant be allowed to locate a wet pond in this area given its location to the retaining wall?

Thank you for the opportunity to provide comments on this development proposal. Along with the requested findings, please provide a revised site plan which addresses the comments above. If you have any additional questions please contact me at 410-260-3475.

Sincerely,



Kate Charbonneau
Regional Program Chief
QC471-08

cc: Martha Herman, Queen Anne County
Tom Davis, DMS & Associates

Martin O'Malley
Governor

Anthony G. Brown
Lt. Governor



Margaret G. McHale
Chair

Ren Serey
Executive Director

**STATE OF MARYLAND
CRITICAL AREA COMMISSION
CHESAPEAKE AND ATLANTIC COASTAL BAYS**

1804 West Street, Suite 100, Annapolis, Maryland 21401
(410) 260-3460 Fax: (410) 974-5338
www.dnr.state.md.us/criticalarea/

October 21, 2008

Mr. Frank Hall
Queen Anne's County
Department of Land Use, Growth Management
and Environment
160 Coursevall Drive
Centreville, MD 21617

**Re: Bay East Development Corporation
#CP #04-05-07-0005-C**

Dear Mr. Hall:

Thank you for forwarding revised plans and information on the above referenced concept plan. The applicant proposes to create a multiuse development on a 7.934 acre site that is located in the Intensely Developed Area and in a Buffer Exemption Area. Please see the comments below.

1. Queen Anne's County Code section 14:1-53.E (1)(a) requires that the extent of the lot or parcel shoreward of the development shall be required to be established in natural vegetation on this site. In order to meet this requirement, the area of the 50 foot setback must be planted with native vegetation. Section 14:1-53.E (1)(b) requires that natural vegetation of an area twice the extent of the impervious surface must be created on the property or other similar location approved by the Planning Director. The plans indicate that 1.017 acres of new impervious surface will result from the proposal. Therefore, in addition to planting the 50-foot setback, 2.034 acres of mitigation is required. Please address how the mitigation requirement will be met.
2. The figures on the 10% pollutant removal requirement worksheet submitted do not match the impervious surface figures on the plans. Please revise the worksheet and submit it to

Letter to Frank Hall
October 21, 2008
Page 2 of 2

ensure that the pollutant removal measures are appropriately incorporated into the design of the site at this concept stage.

Thank you for the opportunity to comment. Please telephone me at (410) 260-3479 if you have any questions.

Sincerely,

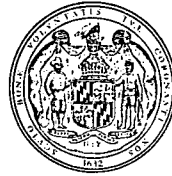
A handwritten signature in black ink, appearing to be 'M. Johnson', written over a horizontal line.

Marshall Johnson
Natural Resource Planner

cc: QC 471-05

Martin O'Malley
Governor

Anthony G. Brown
Lt. Governor



Margaret G. McHale
Chair

Ren Serey
Executive Director

STATE OF MARYLAND
CRITICAL AREA COMMISSION
CHESAPEAKE AND ATLANTIC COASTAL BAYS

1804 West Street, Suite 100, Annapolis, Maryland 21401
(410) 260-3460 Fax: (410) 974-5338
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August 11, 2008

Ms. Holly Tompkins
Queen Anne's County
Department of Land Use, Growth Management
and Environment
160 Coursevall Drive
Centreville, MD 21617

**Re: Bay East Development Corporation
#CP #04-05-07-0005-C**

Dear Ms. Tompkins:

Thank you for forwarding revised plans and information on the above referenced concept plan. The applicant proposes to create a multiuse development on a 7.934 acre site that is located in the Intensely Developed Area and in a Buffer Exemption Area. Comments are provided below on the revised plans.

1. As we discussed in meetings with the applicant, in order to comply with Queen Anne's County Code section 14:1-53, a 50 foot setback from the landward edge of the proposed public walkway should be provided to the maximum extent possible. If the structures along the eastern side of the development can not be moved further back from the shoreline for this purpose, then the plantings in the Buffer should be increased elsewhere to compensate for the loss. The revised plans include a planting plan for Buffer/setback. Queen Anne's County Code section 14:1-53.E (1) requires that the extent of the lot or parcel shoreward of the development be established in natural vegetation on this site. There appear to be blank areas on the plan along the eastern side of the development where a setback achieving or approaching 50 feet could be provided with Buffer plantings. Because no grass/lawn will be allowed in the 100 foot Buffer, and because the public walkway encroaches on the setback at those locations, the setback should be shown as close to 50 feet in width as the proposed buildings will allow, and Buffer plantings should be located in these areas.
2. The 10% worksheet A submitted states that the 10% requirement will be met using sand filters and ponds. Please submit a plan showing conceptually where the sand filters and

Letter to Holly Tompkins
August 11, 2008
Page 2 of 2

ponds will be located so that we can confirm that they can be sized and designed to function and will fit on the site.

Thank you for the opportunity to comment. Please telephone me at (410) 260-3479 if you have any questions.

Sincerely,



Marshall Johnson
Natural Resource Planner

cc: QC 471-05

Martin O'Malley
Governor

Anthony G. Brown
Lt. Governor



Margaret G. McHale
Chair

Ren Serey
Executive Director

**STATE OF MARYLAND
CRITICAL AREA COMMISSION
CHESAPEAKE AND ATLANTIC COASTAL BAYS**

1804 West Street, Suite 100, Annapolis, Maryland 21401
(410) 260-3460 Fax: (410) 974-5338
www.dnr.state.md.us/criticalarea/

December 12, 2007

Ms. Holly Tompkins
Queen Anne's County
Department of Land Use, Growth Management and Environment
160 Coursevall Drive
Centreville, MD 21617

**Re: Bay East Development Corporation
#CP #04-05-07-0005-C**

Dear Ms. Tompkins:

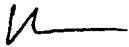
Thank you for forwarding revised plans and information on the above referenced concept plan. The applicant proposes to create a multiuse development on a 7.934 acre site that is located in the Intensely Developed Area and in a Buffer Exemption Area. Comments from the previous letter from this office have not been adequately addressed. Please see the comments below.

1. The proposed walkways do not meet Queen Anne's County Code section 14:1-53. This office would agree that a feasible alternative along the east side of the site would be to provide a 50-foot setback measured from the landward edge of the public walkway with a minimized width and pervious surface or stormwater directed to a BMP, as stated in the previous letter from this office. The proposed private boardwalk along the north side of the site should not be continuous along the shore. A minimized pervious perpendicular riparian accessway is acceptable. Documentation of findings by the Planning Director that there is no feasible alternative and that intrusion into the Buffer is the minimum necessary is required in order to allow any development in the Buffer. Documentation of these findings must be submitted to this office as required by the County Code section 14:1-53.
2. Queen Anne's County Code section 14:1-53.E (1) requires that the extent of the lot or parcel shoreward of the development shall be required to be established in natural vegetation on this site. In order to meet this requirement, the area of the 50 foot setback must be planted with native vegetation. Lawn can not be placed anywhere in the 50 foot setback area, and regular mowing will not be allowed.

3. The applicant has provided existing and proposed impervious surface for the site which would appear to result in a pollutant removal requirement of 6.63 lb/year P. The applicant should address the requirement in order to ensure that the pollutant removal measures may be incorporated into the design of the site. A concept plan for the site that fails to incorporate pollutant removal measures should not be approved, as the stormwater treatment measures potentially require significant changes to the plans.

Thank you for the opportunity to comment. Please telephone me at (410) 260-3479 if you have any questions.

Sincerely,



Marshall Johnson
Natural Resource Planner

cc: QC 471-05

Martin O'Malley
Governor

Anthony G. Brown
Lt. Governor



Margaret G. McHale
Chair

Ren Serey
Executive Director

**STATE OF MARYLAND
CRITICAL AREA COMMISSION
CHESAPEAKE AND ATLANTIC COASTAL BAYS**

1804 West Street, Suite 100, Annapolis, Maryland 21401

(410) 260-3460 Fax: (410) 974-5338

www.dnr.state.md.us/criticalarea/

October 23, 2007

Ms. Holly Tompkins
Queen Anne's County Department of Planning and Zoning
160 Coursevall Drive
Centreville, MD 21617

Re: Bay East Development Corporation
#CP #04-05-07-0005-C

Dear Ms. Tompkins:

Thank you for forwarding information on the above referenced concept plan. The applicant proposes to create a multiuse development on a 7.934 acre site that is located in the Intensely Developed Area and in a Buffer Exemption Area. I have outlined my comments below.

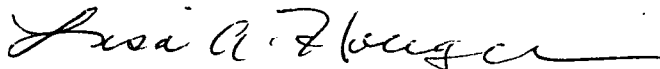
1. We recommend the minimum 50-foot setback be measured from the landward edge of the proposed public walkway to ensure that the 50-foot setback area is being maintained in natural vegetation since the public boardwalk feature will preclude at least 12 feet of vegetated area that the setback is designed to provide.
2. We recommend that the public walkway be designed to direct runoff away from the water side and into the 50-foot setback area, or piped to a Best Management Practice that will be outside the 50-foot setback to provide some water quality benefit.
3. The terminus of the public walkway is wider than 12 feet and needs to be reduced to the 12-foot width to minimize disturbance.
4. A portion of the walkway within the 50-foot setback is labeled as private since it appears a gate will prohibit the public from entering certain portions of this walkway. While we understand this section serves the proposed slips, parallel walkways in the Buffer that are not otherwise providing public access are seen as not complying with the spirit and intent of the County's Critical Area program or its Buffer Exemption Area program. This is because there is a clear public benefit to providing public access; therefore, reasonable public walkways are permitted; however, it is not possible to justify a private walkway that is zero feet from mean high water, pervious or not, since the area of that walkway precludes the ability to vegetate the area as the setback is required to provide.

Ms. Tompkins
November 2, 2007
Page Two

5. We recommend the applicant consider a different configuration of the proposed slips so that the extensive private walkway system can be eliminated from the plan.
6. The portion of the private walkway not serving slips that is at the edge of the bulkhead must be removed from the 50-foot setback. If the applicant desires a private walkway, it must be located behind the 50-foot setback as there are no provisions in the County Code to permit parallel private walkways in the setback.
7. Since the applicant has indicated that the open water portions of the site were created from uplands and are considered private tidal wetlands, documentation must be provided to demonstrate private ownership.
8. We continue to recommend that the applicant provide some preliminary 10% pollutant reduction calculations for this site to ensure there is adequate space to provide for any necessary Best Management Practices on the site.

Thank you for the opportunity to comment. Please telephone me at (410) 260-3478 if you have any questions.

Sincerely,



Lisa A. Hoerger
Regional Program Chief

cc: QC 471-05

Robert L. Ehrlich, Jr.
Governor

Michael S. Steele
Lt. Governor



Martin G. Madden
Chairman

Ren Serey
Executive Director

**STATE OF MARYLAND
CRITICAL AREA COMMISSION
CHESAPEAKE AND ATLANTIC COASTAL BAYS**

1804 West Street, Suite 100, Annapolis, Maryland 21401
(410) 260-3460 Fax: (410) 974-5338
www.dnr.state.md.us/criticalarea/

September 27, 2005

Ms. Tanya Krista-Maenhardt
Queen Anne's County
160 Coursevall Drive
Centreville, MD 21617

RE: Concept Plan, Bay East Development Corporation
CP# 04-05-07-0005© - REVISION #1

Dear Ms. Krista-Maenhardt:

Thank you for providing revision #1 of the above concept plan. The applicant proposes to construct 49 townhouse-type condominium units on a parcel containing 6.223 acres of uplands. The site is designated IDA and is Buffer Exempt. Commission staff has reviewed the information provided and we have the following comments:

1. All IDA development requirements must be addressed. Due to the proposed anticipated level of impervious cover, the 10% requirement may be difficult to address fully on site.
2. A 50-foot shore buffer will be required. No disturbance of any kind will be permissible within 50 feet of the water. Further discussion is needed in regard to the proposed walkway. A parallel walkway at the shoreline does not minimize impacts to the Buffer. Significant on-site mitigation will also be required.
3. Based on the lessons learned from the nearby Narrows Pointe development, we recommend that all units be set back with enough space to provide decks entirely outside of the 50 foot Buffer. With the exception of plantings, no disturbance should be permitted within the Buffer.
4. We recommend that the applicant immediately consult with the Maryland Department of the Environment and the US Army Corps of Engineers regarding the proposed bulkheading around the entire shoreline. Based on recent practice, it seems highly unlikely that new bulkheading would be approved. This will affect the design of

Ms. Tanya Krista-Maenhardt
September 27, 2005
Page 2 of 2

shoreline improvements (including design of the community pier) and will also affect the location of the Buffer.

5. It appears that a portion of the property is open water. The applicant should demonstrate ownership over these areas.
6. How was the number of slips at the community pier determined?

Thank you for the opportunity to comment. If you have any questions or concerns, please contact me at (410) 260-3477.

Sincerely,



LeeAnne Chandler
Natural Resources Planner

cc: QC 471-05

Robert L. Ehrlich, Jr.
Governor

Michael S. Steele
Lt. Governor



Martin G. Madden
Chairman

Ren Serey
Executive Director

**STATE OF MARYLAND
CRITICAL AREA COMMISSION
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1804 West Street, Suite 100, Annapolis, Maryland 21401
(410) 260-3460 Fax: (410) 974-5338
www.dnr.state.md.us/criticalarea/

July 29, 2005

Ms. Tanya Krista-Maenhardt
Queen Anne's County
160 Coursevall Drive
Centreville, MD 21617

RE: Concept Plan, Bay East Development Corporation
CP# 04-05-07-0005©

Dear Ms. Krista-Maenhardt:

Thank you for providing information on the above concept plan. The applicant proposes to construct 49 townhouse-type condominium units on a 7.912-acre parcel. The site is designated IDA and is Buffer Exempt. Commission staff has reviewed the information provided and we have the following comments:

1. Existing gravel along the bulkhead is not an appropriate "structure" to utilize as a means to establish a setback line. Title 14, Section 153- ??? clearly states, "existing structure" To my knowledge, the County does not consider gravel a structure.
2. All IDA development requirements must be addressed. Due to the proposed anticipated level of impervious cover, the 10% requirement may be difficult to address fully on site.
3. A 50-foot shore buffer will be required. No disturbance of any kind will be permissible within 50 feet of the water. Further discussion is needed in regard to the proposed walkway. Significant on-site mitigation will also be required.
4. It appears that a portion of the property is open water. The applicant should demonstrate ownership over these areas.

Thank you for the opportunity to comment. If you have any questions or concerns, please contact me at (410) 260-3477.

Sincerely,


LeeAnne Chandler
Natural Resources Planner

cc: QC 471-05

TTY for the Deaf
Annapolis: (410) 974-2609 D.C. Metro: (301) 586-0450



Davis, Moore, Shearon & Associates, LLC

January 4, 2010

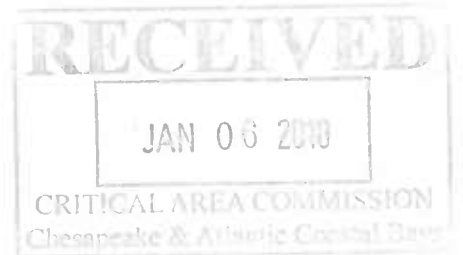
Steve Cohoon, Development Review Chief
Queen Anne's County
Land Use, Growth Management & Environment
160 Coursevall Drive
Centreville, MD 21617

**RE: SITE PLAN REVIEW SUBMITTAL FOR PROPOSED MIXED USE
DEVELOPMENT, LANDS OF BAY EAST DEVELOPMENT
CORPORATION, LOCATED 100 PINEY NARROWS ROAD, KENT
NARROWS DMS & ASSOCIATES JOB #2008076**

Dear Steve:

Attached please find the following information:

- 15 Cover Letters
- 15 Site Plan Review Applications
- 15 Site Plans
- 2 Deeds
- Adjacent Landowner Notification Info
- 1 Site Plan Review Fee
- Architectural Information
- Critical Area Report/Environmental Letters
- 3 Stormwater Management Reports



The purpose of this submittal is to initiate the site plan review process for the proposed mixed development as represented on the attached site plans.

We offer the following with respect to several issues related to the project:

Buffer Exempt Area Issues

The subject site has been disturbed in the past to the extent that gravel exists at the bulkhead line and the site has been used as a dredged spoils disposal site such that the property is designated as buffer exempt. The project involves a mixed use development with access and parking. The residential buildings have been oriented to take advantage of the waterfront access and view points. Due to the fact that the site is adjacent to the Kent Narrows and the Piney Narrow Yacht Haven boat basin the extent of the 100' buffer encompasses a significant portion, approximately 51%, of the site. To avoid impacts within the buffer would restrict the development of the property significantly.

Since the development of the original concept plan the layout of the site has been redesigned such that we have reduced the impervious surfaces in the buffer exempt area. All mitigation plantings are now proposed within the 50' buffer.

A portion of the impacts to the shore buffer are the result of compliance with the WVC requirements to provide a public boardwalk along the waterfront. The boardwalk will be constructed at the bulkhead line and is located no closer to the water than previously existing gravel which has been utilized by a marine contractor to access the existing piers.

The project has been designed to realize the density and impervious area permitted in the WVC District. The impacts to the critical area and buffer exempt area will be offset by mitigation planting and stormwater management facilities.

We believe that the intrusion into the buffer is the least necessary and justified because:

- a) New impervious areas are not proposed any closer than existing gravel adjacent to the bulkhead.
- b) The proposed development does not impact any habitat protection areas.
- c) Other properties in the immediate environs are developed with almost 100% impervious coverage within the buffer exempt area portions of the sites.
The WVC District requires intrusion within the buffer to provide the public boardwalk and allows buildings as close to 15' to tidal waters.
- d) The site is currently disturbed due to the construction of the dredged spoils materials on the site.

You had previously made findings that the intrusions into the buffer were the least necessary to allow the development as originally proposed. With the reconfigured layout we request that you again make the required findings that the intrusion into the buffer is the least necessary to allow the development as proposed.

Stormwater Management Issues

To address the County and Critical Areas stormwater management requirement for water quality control we have proposed a series of planter filter devices, surface sand filters, underground filters, and grassed channels. With these measures the calculations show that the measures are short of providing the required reduction in keystone pollutant. To address this shortcoming we would propose a fee in lieu of providing on site facilities for the shortcomings.

Shoreline & Community Marina Improvements

A permit application for the bulkhead, boardwalk, piers and slips has been submitted to the MDE for processing. As the permit process continues we will provide copies of correspondence from the MDE and Corps of Engineers.

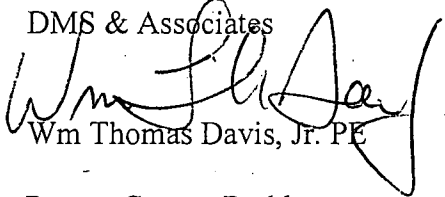
Steve Cohoon
January 4, 2010
2008076
Page 3 of 3

We ask that you please process this project for review at the January 19, 2010 STAC meeting with the goal of reviewing the project with the Planning Commission as soon as possible.

If you should have questions or need additional information please do not hesitate to call me at 443-262-9130

Sincerely,

DMS & Associates



Wm Thomas Davis, Jr. PE

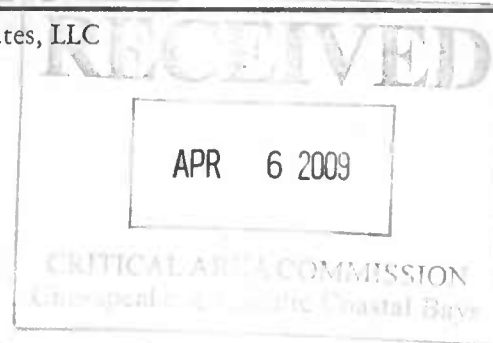
Pc: George Rathlev

DMS

Davis, Moore, Shearon & Associates, LLC

April 3, 2009

Mr. Steve Cohoon, Director
Queen Anne's County Dept of Land Use,
Growth Management and Environment
160 Coursevall Drive
Centreville, MD 21617



**RE: BUFFER EXEMPT ISSUES FOR PROPOSED DEVELOPMENT, LANDS OF
BAY EAST DEVELOPMENT, LLC, LOCATED, KENT NARROWS, CONCEPT
PLAN FILE #04-05-07-0005-C, DMS & ASSOCIATES JOB #2008076**

Dear Steve:

The following is offered in support of our proposal for development of the mixed use development on the Bay East property as relates to the buffer exempt issues contained in Section 14-153 of the Queen Anne's County Code and to address comments provided to your office by Marshall Johnson dated October 21, 2008.

We offer the following with the Buffer Exempt Area issues:

1. The subject parcel is located in the Kent Narrows growth area, zoned WVC (Waterfront Village Center), and has a critical area designation of IDA and BEA. These designations combine to create the least restrictive zoning designation in the County. These designations are characteristic of land which was previously developed or disturbed and for which future additional development is anticipated.
2. To the west and north the Piney Narrows Yacht Haven exists with impervious surfaces within the 100' buffer and impervious surfaces that extend to the bulkhead and adjacent to Kent Narrows and the boat basin serving the marina. To the south exists the county landing with impervious surfaces within the 100' buffer and impervious surfaces that extend to the bulkhead adjacent to Kent Narrows. Due to the extent of development on the adjacent properties there is no viable connection or an extension of the shore buffer to these properties. This isolated shore buffer, established for the most part from man made tidal waters (Piney Narrow Yacht Haven marina basin) in this location has very limited ability to provide water quality and habitat benefits that are the goals of the Critical Area legislation.
3. Based on the critical areas environmental study provided by McCarthy & Associates and review of permits issued for previous development on the site the site has historically been used as a dredged spoils disposal site. The site has also served as the base for a

marine contracting business with impervious surfaces and a small shed located within the shore buffer.

4. Currently a small shed exists within 50' of the shoreline. The impervious surfaces associated with the gravel storage areas for the marine contractor exist within 39' of the shoreline. The current proposal is designed such that the closest building corner of the new buildings will be 50' feet from the bulkhead adjacent to Kent Narrows and complies with the 15' BRL required by the WVC district.
5. The proposed boardwalk is to be located at the bulkhead line where required per the Kent Narrows development guidelines as established by the Kent Narrow Community Plan.
6. The development includes slips consistent with the county and critical areas guidelines. The proposed walk adjacent to the bulkhead and other pedestrian access paths have been reduced to the minimum necessary to serve these slips for the intended purpose to access the water dependent facilities.
7. Stormwater management for water quality requirements will be addressed by creation of a variety of stormwater management facilities to include sand filters, bio retention areas, and small pocket ponds.

With respect to the letter from Marshall Johnson to Frank Hall dated 10-21-2008 we offer the following:

- 1) Section 14:1-53E.1.a states that the area shoreward of the development shall be required to remain, or be established and maintained, in natural vegetation. Our proposal except for the disturbances associated with pedestrian paths and boardwalks is to maintain the existing vegetation currently within the area between the proposed development improvements and the bulkhead, boardwalk, and shoreline. Section 14:1-53E.1.B requires mitigation in the form of natural vegetation of an area twice the extent of the impervious area proposed in the buffer to be created on site. Historically the required plantings have been installed within the shore buffer and not on other areas of the site. Our proposal is that the required planting be installed within the shore buffer as mitigation of the impervious surfaces proposed and that these plantings will enhance the native vegetation to remain undisturbed. This methodology has been used and approved by the Critical Areas staff on similar project such as Narrows Pointe and the Holiday Inn Express.
- 2) The stormwater management report has been revised consistent with the impervious surfaces proposed on the site plans. We attach an updated copy of the stormwater management report that we would request that you forward to the Critical Areas staff.

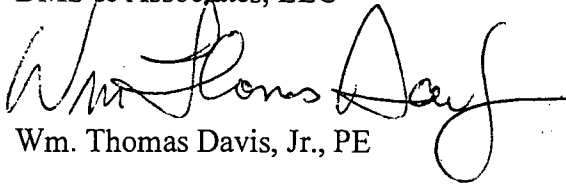
It is our opinion that the project as proposed creates the least amount of disturbance and intrusion into the buffer to allow the development consistent with that permitted by the

WVC zoning district. We ask that you review this information and make finding that the project complies with Section 14-153-d-1 & d-2 of the County Code.

If you should have any questions or need any additional information please do not hesitate to call me at (443) 262-9130.

Sincerely,

DMS & Associates, LLC

A handwritten signature in black ink, appearing to read "Wm. Thomas Davis, Jr.", written over the printed name.

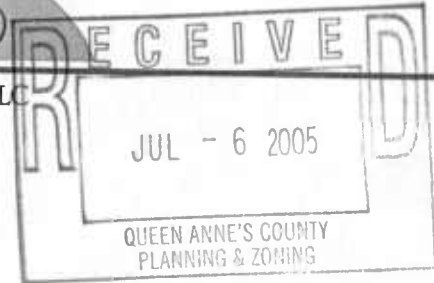
Wm. Thomas Davis, Jr., PE

Enclosures

Pc: George Rathlev, Bay East Development Company
✓ Kate Charbonneau, Critical Areas Commission
Jeff Thompson, Esquire



Davis, Moore, Shearon, & Associates, LLC



July 6, 2005

Steve Cohoon, Development Review Chief
Queen Anne's County Planning & Zoning
160 Coursevall Drive
Centreville, MD 21617

**RE: CONCEPT PLAN REVIEW SUBMITTAL FOR PROPOSED TOWNHOUSE
STYLE CONDOMINIUMS, LANDS OF BAY EAST DEVELOPMENT
CORPORATION, LOCATED 100 PINEY NARROWS ROAD, KENT NARROWS
DMS & ASSOCIATES JOB #2004081**

Dear Steve:

Attached please find the following information:

- 12 Cover Letters
- 12 Concept Plan Review Applications
- 12 Concept Plans
- 2 Deeds
- Adjacent Landowner Notification Info
- 1 Concept Plan Review Fee

The purpose of this submittal is to initiate the concept plan review process for the proposed 49 unit townhouse style condominium development as represented on the attached concept plan.

We offer the following with respect to several issues related to the project:

Buffer Exempt Area Issues

The subject site has been disturbed in the past to the extent that gravel exists at the bulkhead line and the site has been used as a dredged spoils disposal site such that the property is designated as buffer exempt. The project involves 49 townhouse condominiums with access and parking that have been oriented to take advantage of the waterfront access and view points. Due to the fact that the site is adjacent to the Kent Narrows and the Piney Narrow Yacht Haven boat basin the extent of the 100' buffer encompasses a significant portion, approximately 51%, of the site. To avoid impacts within the buffer would restrict the development of the property significantly.

A portion of the impacts to the shore buffer are the result of compliance with the WVC requirements to provide a public boardwalk along the waterfront. The boardwalk will be constructed at the bulkhead line and is located no closer to the water than previously existing gravel which has been utilized by a marine contractor to access the existing piers.

P.O. Box 80 Centreville, MD 21617

Phone: (443) 262-9130

Fax: (443) 262-9148

The buildings, with the exception of the wooden decks, where adjacent to the bulkhead have been designed to maintain a 50' setback from tidal waters consistent with staff policy for other projects within the WVC District.

The project has been designed to realize the density and impervious area permitted in the WVC District. The impacts to the critical area and buffer exempt area will be offset by mitigation planting and stormwater management facilities.

We believe that the intrusion into the buffer is the least necessary and justified because:

- a) New impervious areas are not proposed any closer than existing gravel adjacent to the bulkhead.
- b) The proposed development does not impact any habitat protection areas.
- c) Other properties in the immediate environs are developed with almost 100% impervious coverage within the buffer exempt area portions of the sites.

The WVC District requires intrusion within the buffer to provide the public boardwalk and allows buildings as close to 15' to tidal waters.

- d) The site currently appears as a park like area because the current landowner has maintained the site by periodic mowing. The site still exhibits a high degree of disturbance due to the presence of the dredged spoils materials on the site.

Sewer & Water Allocation/MSWP Issues

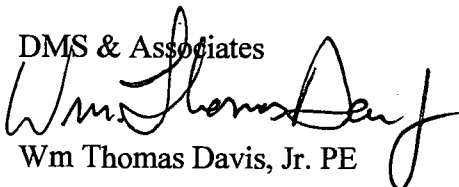
The County Commissioners must approve the project as an amendment to the Master Sewer and Water Plan. We therefore are requesting the Planning Commission make a favorable recommendation for award of the necessary sewer and water allocations, for the amendment of the project into the master sewer and water plan, and for amending the MSWP to reflect the site as a W-1 with respect to public water services.

We ask that you please process this project for review at the August 3, 2005 STAC meeting with the goal of reviewing the project with the Planning Commission as soon as possible.

If you should have questions or need additional information please do not hesitate to call me at 443-262-9130

Sincerely,

DMS & Associates



Wm Thomas Davis, Jr. PE

Pc: Andrew Teeters, Beazer Homes, Inc.

CONTRACT DRAWINGS
FOR INFRASTRUCTURE IMPROVEMENTS
PROPOSED MIXED USE DEVELOPMENT
ON THE LANDS OF
BAY EAST DEVELOPMENT CORP.
FOURTH ELECTION DISTRICT, QUEEN ANNE'S COUNTY, MARYLAND
PREPARED FOR : BAY EAST DEVELOPMENT CORP.

NOTES

- PROPERTY LINE AND EXISTING IMPROVEMENTS SHOWN HEREON ARE TAKEN FROM A PLAT ENTITLED "BOUNDARY AND TOPOGRAPHIC SURVEY ON THE LANDS OF BAY EAST DEVELOPMENT CORP." PREPARED BY THE DELMARVA SURVEY COMPANY, DATED SEPTEMBER, 2005.
- FOR DEED REFERENCE, SEE LIBER M.W.M. 229, FOLIO 162.
- CURRENT ZONING CLASSIFICATION IS "WVC" - (WATERFRONT VILLAGE CENTER)
- THE PROPERTY IS ENTIRELY LOCATED WITHIN THE CHESAPEAKE BAY CRITICAL AREA DESIGNATION - IDA AND IS BUFFER EXEMPT. THIS SITE IS AN UNDEVELOPED PARCEL OF LAND LYING ENTIRELY WITHIN THE CHESAPEAKE BAY CRITICAL AREA AND LOCATED NORTH OF THE COUNTY LANDING ON THE EAST END OF PINEY NARROWS SERVICE ROAD.
- SITE IS ENTIRELY LOCATED WITHIN 100 YEAR FLOOD PLAIN AS SCALED FROM FLOOD INSURANCE RATE MAP COMMUNITY PANEL NO. 240054 0046 C. DATED JULY 3, 1986.
- THE SOIL TYPE "Hg" (HONGA PEAT) IS FOUND ON THE SITE AS SCALED FROM 1994-1995 SOILS SURVEY MAPS No. 31 & 32 OF QUEEN ANNE'S COUNTY.
- PUBLIC SEWER WILL BE UTILIZED FOR SEWAGE DISPOSAL AND PUBLIC WATER WILL BE UTILIZED FOR POTABLE WATER SUPPLY.
- NONTIDAL WETLANDS ARE NOT PRESENT ON THE SITE ACCORDING TO A JURISDICTIONAL DETERMINATION BY THE U.S. ARMY CORPS OF ENGINEERS, DATED OCTOBER 22, 2003.
- THIS PLAN IS EXEMPT FROM TITLE 18, SUBTITLE 2 OF THE COUNTY CODE OF QUEEN ANNE'S COUNTY, BECAUSE IT IS AN AREA GOVERNED BY THE CHESAPEAKE BAY CRITICAL AREA PROTECTION LAWS, TITLE 8, SUBTITLE 18 OF THE NATURAL RESOURCES ARTICLE, ANNOTATED CODE OF MARYLAND. SEE SECTION 18-2-4(b)(2).
- THE PROJECT HAS RECEIVED APFS APPROVAL IN ACCORDANCE WITH A LETTER FROM THE TRC, DATED JUNE 3, 2005. AFTER CONCEPT PLAN APPROVAL AND PRIOR TO THE SUBMITTAL OF A SITE PLAN REVIEW APPLICATION, AN UPDATED APFS WILL BE SUBMITTED TO REFLECT THE MODIFICATIONS TO THE SITE USES AND TO PROVIDE UPDATED CURRENT INFORMATION PRIOR TO SITE PLAN SUBMITTAL.
- SITE REQUIREMENTS:
RESIDENTIAL:
BUILDING SETBACKS (REQUIRED):
FRONT = 25'
REAR = 25'
SIDE = 15'
MAXIMUM BUILDING HEIGHT:
PRINCIPAL = 45' (ALLOWED)
PRINCIPAL = 45' (PROPOSED)
COMMERCIAL:
BUILDING SETBACKS (REQUIRED):
FRONT = 25'
REAR = 10'
SIDE = 10'
MAXIMUM BUILDING HEIGHT:
PRINCIPAL = 45' (ALLOWED)
PRINCIPAL = 45' (PROPOSED)

SITE STATISTICS

CURRENT USE - VACANT	
PROPOSED USE - RESIDENTIAL TOWNHOUSES AND FIRST FLOOR COMMERCIAL BUILDINGS WITH RESIDENTIAL UNITS ABOVE. THE RESIDENTIAL UNITS ARE CONSIDERED MULTIPLEX RESIDENTIAL UNITS AND ARE TO CONFORM TO SECTION 18-1-36 OF THE COUNTY CODE.	
GROSS AREA	= 7,934 ac.±
AREA IN TIDAL WATERS	= 1,697 ac.±
BASE SITE AREA	= 6,237 ac.±
CRITICAL AREA (IDA)	= 7,934 ac.±
AREA IN BUFFERS	= 0.143 ac.±
AREA WITHIN 100 Yr. FLOOD PLAIN	= 6,258 ac.±
AREA WITHIN RESOURCE PROTECTION	= 1,588 ac.±
No. OF DWELLING UNITS (PERMITTED)	= 50 du's (8 du's/acres)
No. OF DWELLING UNITS (PROPOSED)	= 49 du's
MINIMUM OPEN SPACE (REQUIRED)	= 1,877 ac.± (30%)
OPEN SPACE (PROPOSED) (DEED RESTRICTED)	= 1,877 ac.± (30%)
IMPERVIOUS AREA (ALLOWED)	= 4,366 ac.± (70%)
IMPERVIOUS AREA (EXISTING)	= 0.733 ac.±
IMPERVIOUS AREA TO BE REMOVED (EXISTING)	= 0.733 ac.±
IMPERVIOUS AREA (PROPOSED)	= 3,256 ac.±
IMPERVIOUS AREA (TOTAL)	= 3,256 ac.± (52.2%)
LANDSCAPE AREA (REQUIRED)	= 1,877 ac.± (30%)
LANDSCAPE AREA (EXISTING)	= 5,525 ac.±
LANDSCAPE AREA (PROPOSED)	= 2,981 ac.± (47.8%)

SITE STATISTICS - NON RESIDENTIAL

GROSS SITE AREA	= 7,934 AC.±
AREA TO SUPPORT THE RESIDENTIAL COMPONENT	= 6,125 AC.±
AREA FOR COMMERCIAL DENSITY DETERMINATION	= 1,809 AC.±
BASE SITE AREA	= 1,809 AC.±
FLOOR AREA (ALLOWED) (30% FAR):	= 0.543 AC.± (23,640 sq. ft.±)
FLOOR AREA (EXISTING)	= 0.000 AC.±
FLOOR AREA (TO BE REMOVED)	= 0.000 AC.±
FLOOR AREA (PROPOSED)	= 0.300 AC.± (13,056 sq. ft.±)
FLOOR AREA (TOTAL)	= 0.300 AC.± (13,056 sq. ft.±)

NOTE: THERE IS NO MAXIMUM IMPERVIOUS AREA LIMITATION OR REQUIRED LANDSCAPED AREA IN THE WVC DISTRICT FOR COMMERCIAL DEVELOPMENTS. LANDSCAPED/OPEN SPACE AREA REQUIREMENTS ARE MET BY THE RESIDENTIAL DENSITY REQUIREMENTS AS INDICATED ABOVE.

PARKING CALCULATIONS

PER SECTION 18-1-36 G.6&7 OF THE COUNTY CODE:
RESIDENTIAL

2.0 spaces/unit X 41 UNITS = 82 SPACES

PARKING (REQUIRED) = 82 SPACES

*** TOTAL NUMBER OF RESIDENTIAL UNITS DOES NOT INCLUDE UNITS ABOVE THE COMMERCIAL BUILDINGS ***

PER SECTIONS 18-1-83(C)(1)(a)(b) & 18-1-83 (C)(2) OF THE COUNTY CODE:

COMMERCIAL BUILDING #1:
1 space/200 sq. ft. (RESTAURANT) X 1,500 sq. ft. = 8 SPACES
1 space/employee X 4 EMPLOYEES = 4 SPACES
1 space/350 sq. ft. (RETAIL) X 2,852 sq. ft. = 8 SPACES

PARKING (REQUIRED) = 20 SPACES

COMMERCIAL BUILDINGS #2 & #3:
1 space/350 sq. ft. (RETAIL) X 2,432 sq. ft. = 7 SPACES
1 space/250 sq. ft. (OFFICE) X 2,432 sq. ft. = 10 SPACES

PARKING (REQUIRED) = 37 SPACES

PARKING (REQUIRED) = 37 SPACES
PARKING (PROPOSED) = 32 SPACES (PARKING LOT)
PARKING (PROPOSED) = 16 SPACES (GARAGES)
PARKING (PROVIDED) = 48 SPACES

2 - PARKING SPACES PROVIDED ON FIRST LEVEL OF EACH BUILDING
61 - ADDITIONAL GUEST PARKING SPACES

BOAT SLIP CALCULATIONS

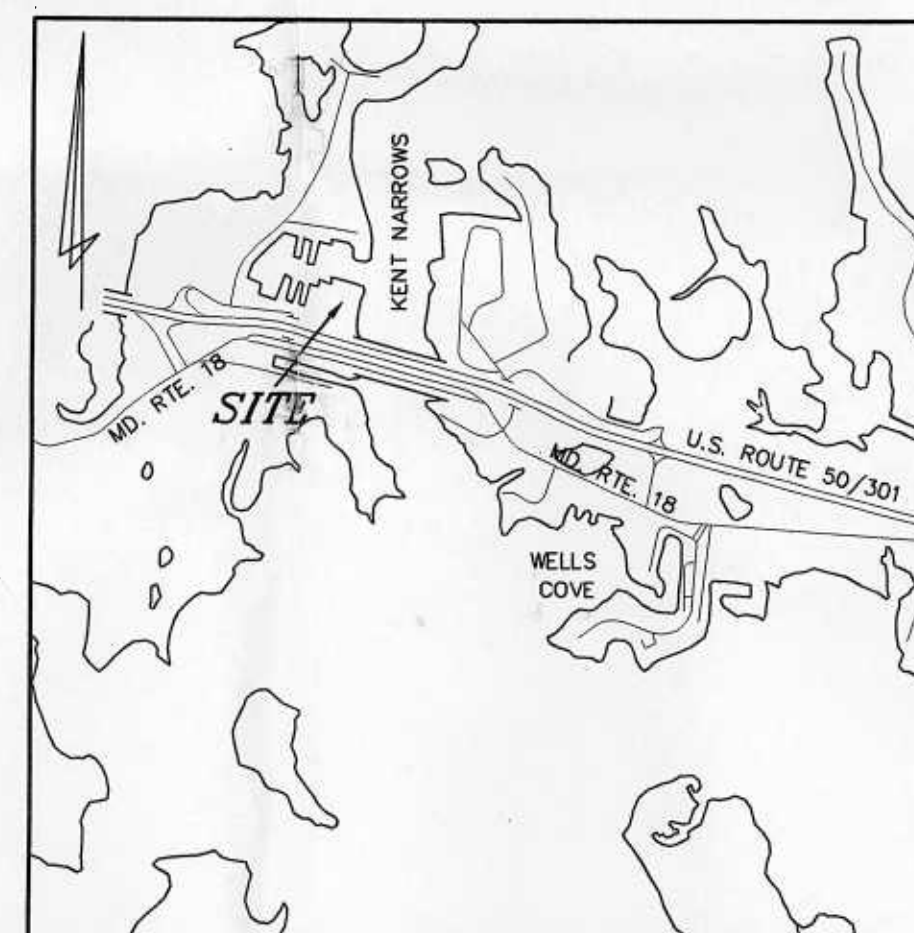
PER SECTIONS 14-1-43 & 18-1-43 OF THE COUNTY CODE:

(a) 1 slip/50 ft of shoreline X 1,450 ft = 29 SLIPS
OR

(b) 1 slip/50% units X 49 units = 24 SLIPS
OR

30 slips for number of units from 41 to 100 units = 30 SLIPS

BOAT SLIPS (ALLOWED) = 25 SLIPS
BOAT SLIPS (PROPOSED) = 25 SLIPS



VICINITY MAP
SCALE 1" = 2000'

OWNER/DEVELOPER

BAY EAST DEVELOPMENT CORP.
A DIVISION OF ATLANTIC DEVELOPMENT
CORP. OF PENNSYLVANIA
c/o ROBERT CADWELL
1445 N. ROCK ROAD
SUITE 200
WICHITA, KANSAS 67206-1292
PHONE No. 1-316-507-2133

ENGINEER

DMS & ASSOCIATES, LLC
P.O. BOX 80
CENTREVILLE, MARYLAND 21617
PHONE No. 1-443-262-9150

TABLE OF CONTENTS

SHEET	C-1	-	TITLE SHEET
SHEET	C-2	-	EXISTING CONDITIONS/DEMOLITION PLAN
SHEET	C-3	-	OVERALL SITE PLAN
SHEETS	C-4	-	ROAD AND ENTRANCE IMPROVEMENTS PLAN
SHEETS	C-5 & C-6	-	DETAILED SITE PLANS
SHEETS	C-7 & C-8	-	SITE, GRADING AND STORMWATER MANAGEMENT PLANS
SHEETS	C-9 & C-10	-	SEDIMENT AND EROSION CONTROL PLANS
SHEETS	C-11 thru C-14	-	STORMDRAIN PROFILES AND SECTIONS
SHEET	C-15	-	OVERALL UTILITY PLAN
SHEETS	C-16 thru C-33	-	SEWER AND WATER PLANS AND PROFILES
SHEETS	C-34 thru C-36	-	DETAIL SHEETS

STATEMENT OF PURPOSE AND INTENT

A PROPOSED AGE RESTRICTED MULTIPLEX PLANNED DEVELOPMENT IS PROPOSED ON THIS SITE AND CONSISTS OF 31 UNITS IN A TOWNHOUSE STYLE CONDOMINIUM REGIME 10 CONDOMINIUM UNITS, A 4,352 sq. ft.± COMMERCIAL BUILDING AS WELL AS 8 COMMERCIAL UNITS WITH RESIDENCES ABOVE. AS A CONDOMINIUM REGIME, ALL UNIT OWNERS WILL SHARE THE USE AND OWNERSHIP OF THE PARKING AREAS, WALKS, DRIVES, etc. EACH TOWNHOUSE WILL HAVE A TWO-CAR GARAGE. A 29 SLIP COMMUNITY MARINA WILL ALSO BE PROPOSED.

THE PURPOSE OF THIS SITE PLAN IS TO OBTAIN APPROVAL FROM THE QUEEN ANNE'S COUNTY PLANNING COMMISSION FOR THE PROPOSED DEVELOPMENT OF THIS SITE.

CERTIFICATION BY THE DEPARTMENT OF LAND USE, GROWTH MANAGEMENT AND ENVIRONMENT

THIS IS TO CERTIFY THAT THIS MAJOR SITE PLAN #01-10-01-0001-C,
IS APPROVED BY THE DEPARTMENT OF LAND USE, GROWTH MANAGEMENT,
AND ENVIRONMENT THIS _____ DAY OF _____, 2010.

J. STEVEN COHOON, CHIEF OF LAND USE AND ZONING

BASE SITE AREA

GROSS SITE AREA	= 7,934 acres
NON-CONTIGUOUS LAND	= 0.000 acres
LAND IN TIDAL WATER	= 1,697 acres
BASE SITE AREA	= 6,237 acres

RESOURCE PROTECTION LAND

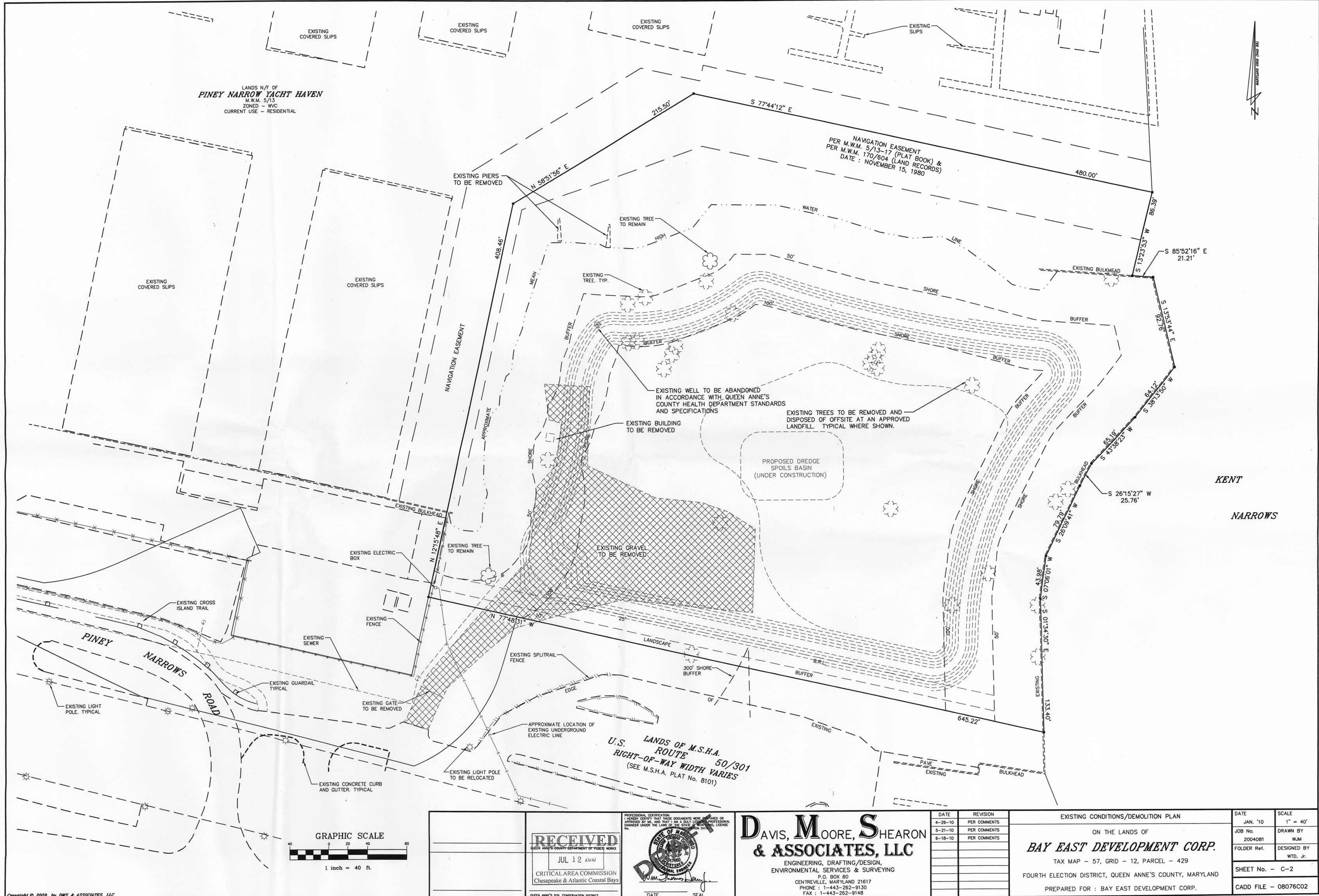
RESOURCE	OPEN SPACE RATIO	RESOURCE LAND	RESOURCE PROTECTION LAND
NONTIDAL WETLANDS	1.00	0.000 acres	0.000 acres
50' SHORE BUFFER	1.00	1.588 acres	1.588 acres
MATURE HARWOODS	0.80	0.000 acres	0.000 acres
TOTAL LAND IN RESOURCE		1.588 acres	
TOTAL RESOURCE PROTECTION LAND			1.588 acres

IMPERVIOUS SURFACE IN THE BUFFER EXEMPTION AREA

TOTAL SITE AREA	= 6,237 AC.±
TOTAL SITE AREA WITHIN THE 300' SHORE BUFFER:	= 6,235 AC.±
TOTAL AREA WITHIN THE 0'-100' CRITICAL AREA BUFFER	= 3,099 AC.±
TOTAL EXISTING IMPERVIOUS SURFACE IN THE 0'-100' CRITICAL AREA BUFFER	= 0.238 AC.±
EXISTING IMPERVIOUS SURFACE IN THE 0'-100' CRITICAL AREA BUFFER TO BE REMOVED	= 0.238 AC.±
TOTAL PROPOSED IMPERVIOUS SURFACE IN THE 0'-100' CRITICAL AREA BUFFER	= 0.815 AC.±
NET INCREASE OF IMPERVIOUS SURFACE IN THE 0'-100' CRITICAL AREA BUFFER	= 0.577 AC.±
TOTAL AREA WITHIN THE 0'-50' CRITICAL AREA BUFFER (BUFFER EXEMPT AREA)	= 1,628 AC.±
TOTAL EXISTING IMPERVIOUS SURFACE IN THE 0'-50' CRITICAL AREA BUFFER	= 0.004 AC.±
EXISTING IMPERVIOUS SURFACE IN THE 0'-50' CRITICAL AREA BUFFER TO BE REMOVED	= 0.004 AC.±
TOTAL IMPERVIOUS PROPOSED WITHIN THE 0'-50' CRITICAL AREA BUFFER	= 0.164 AC.±
TOTAL PROPOSED & EXISTING IMPERVIOUS SURFACE IN THE 0'-50' CRITICAL AREA BUFFER	= 0.164 AC.±
NET INCREASE OF IMPERVIOUS SURFACE IN THE 0'-50' CRITICAL AREA BUFFER	= 0.160 AC.±

BUFFER EXEMPTION AREA MITIGATION

NET INCREASE OF IMPERVIOUS SURFACE IN THE 0'-100' CRITICAL AREA BUFFER	= 0.577 AC.±
NET INCREASE OF IMPERVIOUS SURFACE IN THE 50'-100' CRITICAL AREA BUFFER	= 0.417 AC.±
REQUIRED BUFFER EXEMPTION AREA MITIGATION (2:1 RATIO)	= 0.834 AC.±
AREA ON SITE PROVIDED FOR MITIGATION OF INCREASE OF IMPERVIOUS SURFACE WITHIN THE 100' CRITICAL AREA BUFFER	
TOTAL NUMBER OF 4'-6" CONTAINER GROWN TREES REQUIRED TO BE PLANTED (70- 4'-6" CONTAINER GROWN TREES AT 2:1 RATIO REQUIRED PER ACRE OF REQUIRED BUFFER EXEMPTION MITIGATION AREA)	= 58
NET INCREASE OF IMPERVIOUS SURFACE IN THE 0'-50' CRITICAL AREA BUFFER	= 0.160 AC.±
REQUIRED BUFFER EXEMPTION AREA MITIGATION (3:1 RATIO)	= 0.480 AC.±
AREA ON SITE PROVIDED FOR MITIGATION OF INCREASE OF IMPERVIOUS SURFACE WITHIN THE 100' CRITICAL AREA BUFFER	
TOTAL NUMBER OF 4'-6" CONTAINER GROWN TREES REQUIRED TO BE PLANTED (70- 4'-6" CONTAINER GROWN TREES AT 3:1 RATIO REQUIRED PER ACRE OF REQUIRED BUFFER EXEMPTION MITIGATION AREA)	= 34
TOTAL NUMBER OF 4'-6" CONTAINER GROWN TREES REQUIRED TO BE PLANTED IN THE 0'-50' CRITICAL AREA BUFFER	= 92

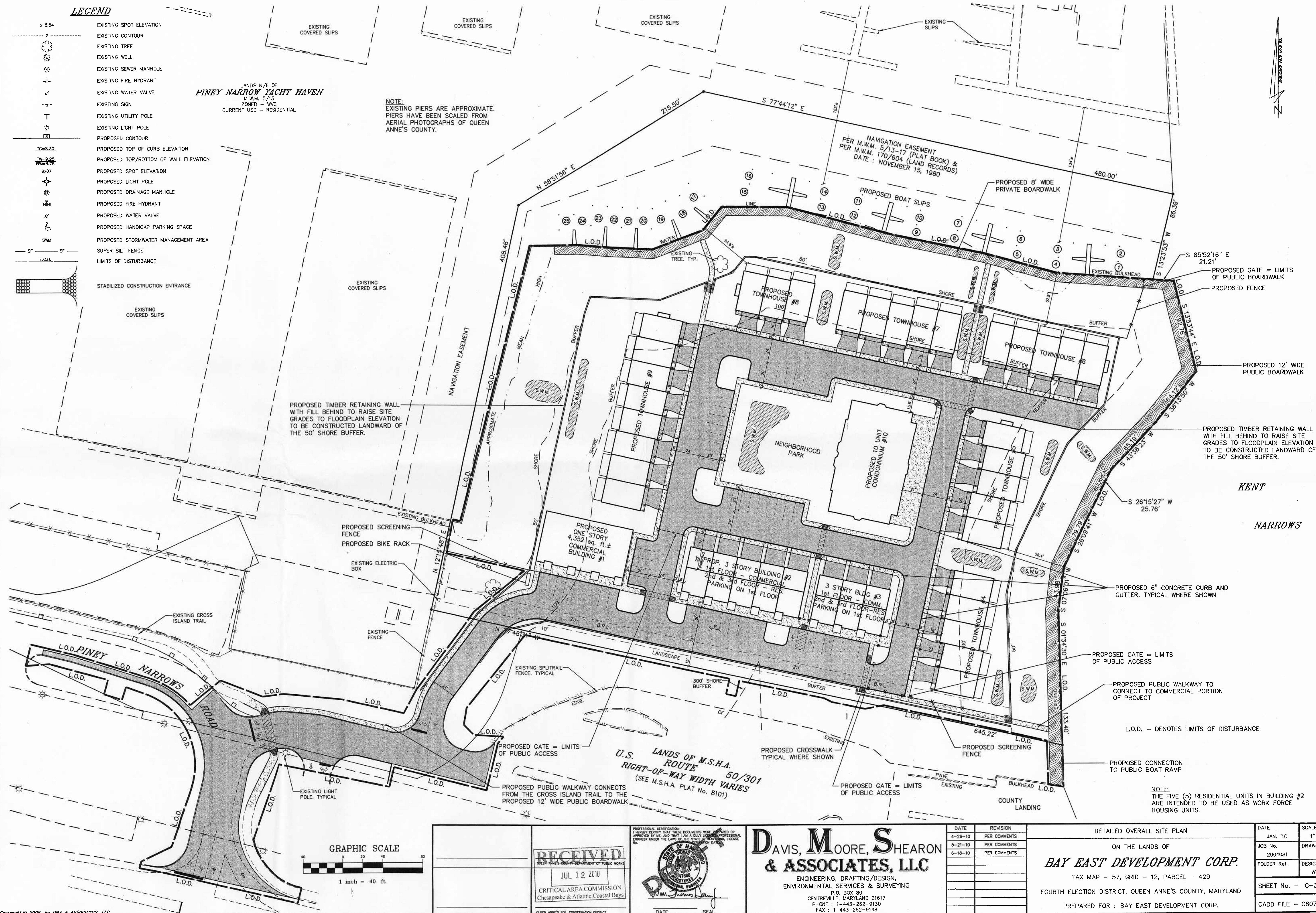


LEGEND

- EXISTING SPOT ELEVATION
- EXISTING CONTOUR
- EXISTING TREE
- EXISTING WELL
- EXISTING SEWER MANHOLE
- EXISTING FIRE HYDRANT
- EXISTING WATER VALVE
- EXISTING SIGN
- EXISTING UTILITY POLE
- EXISTING LIGHT POLE
- PROPOSED CONTOUR
- PROPOSED TOP OF CURB ELEVATION
- PROPOSED TOP/BOTTOM OF WALL ELEVATION
- PROPOSED SPOT ELEVATION
- PROPOSED LIGHT POLE
- PROPOSED DRAINAGE MANHOLE
- PROPOSED FIRE HYDRANT
- PROPOSED WATER VALVE
- PROPOSED HANDICAP PARKING SPACE
- PROPOSED STORMWATER MANAGEMENT AREA
- SUPER SILT FENCE
- LIMITS OF DISTURBANCE
- STABILIZED CONSTRUCTION ENTRANCE
- EXISTING COVERED SLIPS

LANDS N/E OF
PINEY NARROW YACHT HAVEN
M.W.M. 5/13
ZONED - VWC
CURRENT USE - RESIDENTIAL

NOTE:
EXISTING PIERS ARE APPROXIMATE.
PIERS HAVE BEEN SCALED FROM
AERIAL PHOTOGRAPHS OF QUEEN
ANNE'S COUNTY.



GRAPHIC SCALE
1 inch = 40 ft.

RECEIVED
JUL 12 2010
CRITICAL AREA COMMISSION
Chesapeake & Atlantic Coastal Bays

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR
APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL
ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE
No. 17000
DATE SEAL

**DAVIS, MOORE, SHEARON
& ASSOCIATES, LLC**
ENGINEERING, DRAFTING/DESIGN,
ENVIRONMENTAL SERVICES & SURVEYING
P.O. BOX 80
CENTREVILLE, MARYLAND 21617
PHONE : 1-443-262-9130
FAX : 1-443-262-9148

DATE	REVISION
4-26-10	PER COMMENTS
5-21-10	PER COMMENTS
6-18-10	PER COMMENTS

DETAILED OVERALL SITE PLAN
ON THE LANDS OF
BAY EAST DEVELOPMENT CORP.
TAX MAP - 57, GRID - 12, PARCEL - 429
FOURTH ELECTION DISTRICT, QUEEN ANNE'S COUNTY, MARYLAND
PREPARED FOR : BAY EAST DEVELOPMENT CORP.

DATE	SCALE
JAN. '10	1" = 40'
JOB No. 2004081	DRAWN BY W.M.
FOLDER Ref.	DESIGNED BY WTD, Jr.
SHEET No. - C-3	
CADD FILE - 08076C03	

Charbonneau, Katherine

From: Charbonneau, Katherine
Sent: Wednesday, March 17, 2010 2:49 PM
To: 'Rick Davis'
Subject: Bay East

Hi Rick,

Thanks for your patience. I've gone over the outstanding questions we had with the 10% calcs and have some answers for you.

1. Credit for the road – I discussed this with LeeAnne and she pointed out that you'd be required to improve the road by 10% regardless of whether it's being expanded or not. So, we calculated what the 10% req would be for the existing, what the 10% req would be for the new, and deducted that from the pollutant removed. So you $0.32\text{lbs} - 0.084\text{ (old)} - 0.062\text{ (new)} = 0.174$
You can apply this credit to the total.
2. To take up the outstanding requirement I'd like to propose the following additional planting scheme in the setback. The 10% manual gives 2lbs of credit for every acre removed. Based on this formula you can translate the remaining pollutant load in to a square footage (should be somewhere around 7,000 sf).

Based on your clients desire for native grasses, shrubs, and understory trees I suggest the following credit system from our new Buffer regs:

Planting Cluster of 2 understory trees and either 3 large shrubs or 6 small shrubs = 350 square feet.

Herbaceous Perennials of 1 quart size = 2 square feet.

Generally the Buffer regs don't allow more than 10% credit herbaceous for Buffer establishment or Buffer mitigation. However, given the landscaping already proposed and the limited space I would suggest you start at 50% credit for perennials. I think this might look more like what your client wants.

A small shrub is defined as one that can grow up to 6' of height at maturity.

Large shrub is defined as one that is taller than 6' of height at maturity.

Understory tree means a tree that reaches a height of 12'-35' at maturity.

Let me know if the planting becomes problematic and we need to adjust the percentage some.

Thanks!
Kate

Kate Charbonneau

Regional Program Chief

Critical Area Commission for the
Chesapeake and Atlantic Coastal Bays
1804 West Street, Suite 100
Annapolis, MD 21401
410-260-3475

Charbonneau, Katherine

From: Rick Davis [rdavis@dmsandassociates.com]

Sent: Tuesday, February 23, 2010 4:48 PM

To: Charbonneau, Katherine

Subject: Bay East 10%

Kate,

Attached are the revised 10% calculations along with an impervious area table and revised drainage area map. As I mentioned to you today we have changed out the CONTECH stormwater management chambers for a modular concrete vault sand filter which has a pretreatment forebay and has been approved by MDE. Also the areas within the buffer where we would add the bioretention's for additional treatment offer the following problems. The first is that the high tide elevation or ground water is at approximately 1.5 ft and the surrounding grade is elevation 4.0, to allow for ponding the top of the systems would be a maximum elevation of 3.50 which would allow for 1.50 ft of planting/filter material. This depth is less than that minimum of 2.50 ft per MDE but the systems are not the primary treatment for stormwater and would still provide water quality treatment. Additional water quality has now been provided for the entrance improvements and also has been sized for additional existing impervious area associated with the offsite parking lot to help offset any deficit which remains for the site improvements.

Please feel free to give me a call to discuss the calculations.

Rick Davis

DMS & Associates

Phone: 443-262-9130

Fax: 443-262-9148

www.dmsandassociates.com

0.2516 deficit

- work on credit equivalency
mix of trees & shrubs

understanding

- ground cover

0.251 lbs

1 ac = ²~~0.25~~ lbs

$$\frac{2 \text{ lbs}}{1 \text{ ac}} = \frac{0.251}{x}$$

$$2x = 0.251$$

$$x = 0.1255 \text{ ac} = 5466 \#$$

Planting Clusters

2 understory trees } 350⁺
3 large shrubs }

16 Planting Clusters

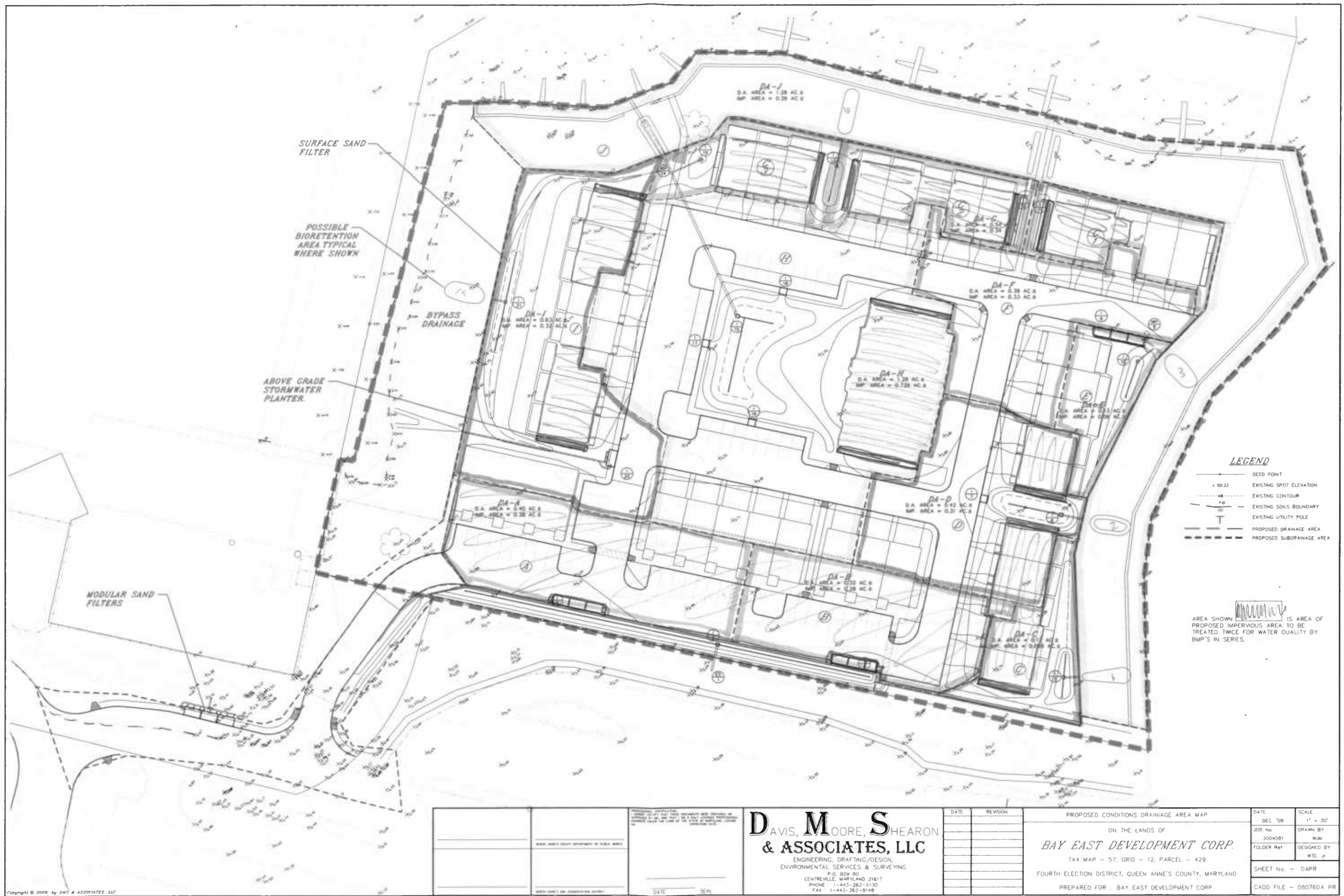
1/3 @ herbaceous perennials

$$8 \# \text{ Planting Clusters} = \frac{2800}{3850} \#$$

¹⁶
~~22~~ understory trees
~~24~~ large shrubs

$$1333 \# \text{ herbaceous perennials} = \frac{1400}{2466} \#$$

1 quart



LEGEND

- DEED POINT
- EXISTING SPOT ELEVATION
- EXISTING CONTOUR
- EXISTING SOILS BOUNDARY
- EXISTING UTILITY POLE
- PROPOSED DRAINAGE AREA
- PROPOSED SUBDRAINAGE AREA

AREA SHOWN IN HATCHED PATTERN IS AREA OF PROPOSED IMPERVIOUS AREA TO BE TREATED TWICE FOR WATER QUALITY BY BMP'S IN SERIES.

<p>DAVIS, MOORE, SHEARON & ASSOCIATES, LLC ENGINEERING, DRAFTING/DESIGN, ENVIRONMENTAL SERVICES & SURVEYING P.O. BOX 80 CENTREVILLE, MARYLAND 21617 PHONE 1-443-262-9130 FAX 1-443-262-9148</p>		<p>DATE: _____ REVISION: _____</p>		<p>PROPOSED CONDITIONS DRAINAGE AREA MAP ON THE LANDS OF BAY EAST DEVELOPMENT CORP. TAX MAP - 57, GRID - 12, PARCEL - 429 FOURTH ELECTION DISTRICT, QUEEN ANNE'S COUNTY, MARYLAND PREPARED FOR BAY EAST DEVELOPMENT CORP.</p>		<p>DATE: DEC '09 JOB No: 2004081 FOLDER Ref: WJM SHEET No: DAPR CADD FILE - 08076DA PR</p>	
<p>SCALE: 1" = 30'</p>		<p>DRAWN BY: WJM DESIGNED BY: WJD, J.</p>					

DMS

Davis, Moore, Shearon, & Associates, LLC
Engineering, Drafting/Design, Environmental Services & Surveying

Impervious Area Table

Drainage Area	Total Area (ac)	Total Impervious Area (ac)	Area Treated Twice (ac)
8.3% DA-A	0.47 .40	0.38	0.41
6.5% DA-B	0.37 .32	0.28	0.32
3% DA-C	0.17	0.096	0.044
7.4% DA-D	0.42	0.31	0.098
2.3 DA-E	0.13	0.06	0
6.9 DA-F	0.39	0.33	0
9.4 DA-G	0.53	0.346	0.24
22.6 DA-H	1.28	0.726	0.18
11.1 DA-I	0.63	0.32	0.13
22.4 DA-J	1.27	0.26	0
Total	5.66	3.11	1.42

F-6/F-1

A - Planter
Inlet +
- Mod. SF +

DA
0.4 100%

F-1 DA
E - 0.13

B - ~~Planter~~
Inlet +
- Mod SF

0.32 100%

F - 0.39

C - Planter
Mod SF

0.17 25.9% (0.044)

D - Planter
Mod SF

0.42 23.3% (0.098)

G

0.53 45% (0.24)

H

1.28 14% (0.18)

I

0.63 20.6% (0.13)

$$RR = 5.395$$

$$LR = 4.2$$

A - $I_E = 0.073$ $I_P = 0.38$ $L_{post} = \frac{0.895}{0.683}$ $RR = 0.683$ Vault SF - 0.447 (1x)

B $I_E = 0.073$ $I_P = 0.28$ $L_{post} = 0.662$ $RR = 0.496$ Vault SF = 0.331 (1x)

A+B $I_E = 0.84$ $I_P = 0.66$ $L_{post} = \frac{1.557}{0.447 - 0.331} = 0.779$ $RR = 0.779 - 0.378 = 0.401$ $0.401 \times 0.25 \times 100\% = 0.1003$

C $I_E = 0.073$ $I_P = 0.096$ $L_{post} = 0.232$ $RR = 0.156$ Planter (20%) = 0.030
(1x) SF (74%) = 0.086
(2x) SF = $0.202 \times 25\% \times 26\% = 0.013$ } 0.129

D $I_E = 0.073$ $I_P = 0.31$ $L_{post} = 0.734$ $RR = 0.545$ Planter (23%) = 0.084
(1x) SF (77%) = 0.283
(2x) SF (23%) = $0.45 \times 25\% \times 23\% = 0.037$ } 0.404

E $I_E = 0.073$ $I_P = 0.06$ $L_{post} = 0.148$ $RR = 0.09$ SF (100%) = 0.074

F $I_E = 0.073$ $I_P = 0.33$ $L_{post} = 0.775$ $RR = 0.589$ VSF (100%) = 0.387

G $I_E = 0.073$ $I_P = 0.346$ $L_{post} = 0.827$ $RR = 0.589$ Planter (74%) = 0.306
SF (2x) (45%) = $0.521 \times 45\% \times 25\% = 0.059$ } 0.365

H $I_E = 0.073$ $I_P = 0.726$ $L_{post} = 1.756$ $RR = 1.18$ Planter (14%) = 0.123
(1x) SF (76%) = 0.667
(2x) SF (14%) = $1.633 \times 25\% \times 14\% = 0.06$ } 0.85

I $I_E = 0.073$ $I_P = 0.32$ $L_{post} = 0.782$ $RR = 0.499$ Planter (21%) = 0.082
1x SF (79%) = 0.309
2x SF (21%) = $0.7 \times 25\% \times 21\% = 0.036$ } 0.751

J $I_E = 0.073$ $I_P = 0.26$ $L_{post} = 0.728$ $RR = 0.157$ Planter SF (100%) = 0.364

WORKSHEET A: Standard Application Process

Calculate Pollutant Removal Requirements

Project Name: BAY EAST DEVELOPMENT

Date: Feb-10

Step1: Calculate Existing and Proposed Site Impervious

A: Calculate Percent Imperviousness

- 1) Site Area within the Critical Area IDA A= 5.660 acres
- 2) Site Impervious Surface Area, Existing and Proposed
(See table 4.1 for details)

	(a) Existing (acres)	(b) Proposed (acres)
Roads		
Parking lots		1.024
Driveways		0.746
Sidewalks/paths		
Rooftops		1.34
Decks		
Swimming pools/ponds		
Other	0.733	
Impervious Surface Area	0.733	3.11

SWM Credit Area = 0
Total Prop. Impervious = 3.11

3) Imperviousness (I)

Existing Imperviousness, I pre

$$\begin{aligned} &= \text{Impervious Surface area} / \text{Site Area} \\ &= (\text{Step 2a}) / (\text{Step 1}) \\ &= \frac{0.733}{5.66} \\ &= \underline{12.95} \% \end{aligned}$$

Proposed Imperviousness, I post

$$\begin{aligned} &= \text{Impervious Surface area} / \text{Site Area} \\ &= (\text{Step 2a}) / (\text{Step 1}) \\ &= \frac{3.11}{5.66} \\ &= \underline{54.95} \% \end{aligned}$$

B: Define Development Category (circle)

- 1) New Development: Existing impervious less than 15% I (Go to step 2A)
- 2) ReDevelopment: Existing impervious of 15% I or more (Go to step 2B)
- 3) Single Lot residential Development: Single lots being developed or improved; single family residential development; and more than 250 sf of impervious area and associated disturbance (Go to Section 5, Residential Approach, for detailed criteria and requirements)

Note: All acrages used in this worksheet refers to areas within the IDA of the Critical Area only

Step2: Calculate the Predevelopment Load (L_{pre})

A: New Development

$$L_{pre} = (0.5) (A)$$

$$= (0.5) \times \frac{5.66}{2.83} \text{ lbs/year of total phosphorus}$$

Where:

- L_{pre} = Average annual load of total phosphorus exported from the site prior to development (lbs/year)
- 0.5 = Annual total phosphorus load from undeveloped lands (lbs/acre/yr)
- A = Area of the site within the Critical Area IDA (acres)

B: ReDevelopment:

$$L_{pre} = (R_v) (C) (A) (8.16)$$

$$R_v = 0.05 + 0.009(I_{pre})$$

$$0.05 + 0.009 \times 12.95 = \boxed{0.06645}$$

$$L_{pre} = 0.00 \times 0.30 \times 5.66 \times 8.16 =$$

$$= \underline{0.000} \text{ lbs/year of total phosphorus}$$

- L_{pre} = Average annual load of total phosphorus exported from the site prior to development (lbs/year)
- R_v = Run off coefficient, which expresses the fraction of rainfall which is converted to runoff
- I_{pre} = Pre-development (existing) site impervious (i.e., $I=75$ if the site is 75% impervious)
- C = Flow-weighted mean concentration of the pollutant (total phosphorus) in urban runoff (mg/l) = 0.30 mg/l
- A = Area of the site within the Critical Area IDA (acres)
- 8.16 = Includes regional constants and unit conversion factors

Step3: Calculate the Post-Development Load (L_{post})

A: New Development and Redevelopment:

$$L_{\text{post}} = (R_v) (C) (A) (8.16)$$

$$R_v = 0.50 + 0.009 (I_{\text{post}})$$

$$= 0.05 + 0.009 \quad 54.95 \quad = 0.54$$

$$L_{\text{post}} = 0.54 \times 0.30 \times 5.66 \times 8.16 =$$

$$= 7.545 \text{ lbs/year of total phosphorus}$$

Where:

L_{post} = Average annual load of total phosphorus exported from the site post-development (lbs/year)

R_v = Run off coefficient, which expresses the fraction of rainfall which is converted to runoff

I_{post} = Post-development (proposed) site impervious (i.e., $I=75$ if the site is 75% impervious)

C = Flow-weighted mean concentration of the pollutant (total phosphorus) in urban runoff (mg/l) = 0.30 mg/l

A = Area of the site within the Critical Area IDA (acres)

8.16 = Includes regional constants and unit conversion factors

Step4: Calculate the Pollutant Removal Requirement (RR)

$$RR = L_{\text{post}} - (0.90) (L_{\text{pre}})$$

$$= 7.54 - 0.90 \times 2.83 =$$

$$= 4.998 \text{ lbs/year of total phosphorus}$$

Where:

RR = Pollutant removal requirement (lbs/year)

L_{post} = Average annual load of total phosphorus exported from the site prior to development (lbs/year)

L_{pre} = Average annual load of total phosphorus exported from the site prior to development (lbs/year)

Step5: Identify Feasible BMP's

Select BMP Options using the screening matrices provided in the chapter 4 of the 2000 Maryland Stormwater Design Manual. Calculate the load removed for each option.

Swam Planting Sand Filter Small Filters Possible Bioretention	BMP Type	(Lpost)	[X]	(BMP re)	[X]	(% DA Served)	=	
	F-6/ F-1	7.55		50		27 1.52	=	1.019 (lbs/year)
	F-1 (A)	7.55		50		72.5 4.1	=	2.735 (lbs/year)
	F-1 (B)	6.53		25		25 1.41	=	0.408 (lbs/year)
	F-6	3.39		25		40 2.26	=	0.339 (lbs/year)
Load Removed, LR (total)								= 4.501 (lbs/year)
Pollutant Removal Required, RR (from step 4)								= 4.998 (lbs/year)
Remaning Pollutant load								= 0.497 (lbs/year)

Where:

- Load removed, LR = Annual total phosphorus removed By the Proposed BMP's (lbs/year)
- L post = Average annual load of total phosphorus exported from the site prior to developoment (lbs/year)
- BMP re = BMP removal efficiency for total phophorus Table 4.8 (%)
- % DA Served = Fraction of the site area with in the critical area IDA served by the BMP(%)
- RR = Pollutant removal requirement (lbs/year)

If the Load Removed is equal to or greater than the Pollutant Removal Required Computed in step 4, then the on-site BMP complies with the 10% Rule.

Has the RR (pollutant removal requirment) been met? ☐ Yes ☐ No

Step5: Identify Feasible BMP's

Select BMP Options using the screening matrices provided in the chapter 4 of the 2000 Maryland Stormwater Design Manual. Calculate the load removed for each option.

BMP Type	(Lpost)	<input checked="" type="checkbox"/> (BMP re)	<input checked="" type="checkbox"/> (% DA Served)	=	
F-4	0.85	50	75	=	0.320 (lbs/year)
				=	0 (lbs/year)
				=	0 (lbs/year)
				=	0 (lbs/year)
Load Removed, LR (total)				=	0.320 (lbs/year)
Pollutant Removal Required, RR (from step 4)				=	0.283 (lbs/year)
Remaning Pollutant load				=	-0.037 (lbs/year)

Where:

- Load removed, LR = Annual total phosphorus removed By the Proposed BMP's (lbs/year)
- L post = Average annual load of total phosphorus exported from the site prior to development (lbs/year)
- BMP re = BMP removal efficiency for total phosphorus Table 4.8 (%)
- % DA Served = Fraction of the site area with in the critical area IDA served by the BMP(%)
- RR = Pollutant removal requirement (lbs/year)

If the Load Removed is equal to or greater than the Pollutant Removal Required Computed in step 4, then the on-site BMP complies with the 10% Rule.

Has the RR (pollutant removal requirment) been met? ☒ Yes ☐ No

- Wants to take credit
for extra 15
77%
(23% new ls)

$$77\% \times 0.32$$

% of offsite not currently
treated

$$.273 - (.9)(.21) =$$

$$\begin{array}{r} .084 \\ .062 \\ \hline .146 \end{array}$$

.174

WORKSHEET A: Standard Application Process

Calculate Pollutant Removal Requirements

Project Name: BAY EAST DEVELOPMENT

Date: Dec-09

Step1: Calculate Existing and Proposed Site Impervious

A: Calculate Percent Imperviousness

- 1) Site Area within the Critical Area IDA A= 0.590 acres Bypass Drainage
- 2) Site Impervious Surface Area, Existing and Proposed
(See table 4.1 for details)

	(a) Existing (acres)	(b) Proposed (acres)
Roads		
Parking lots	<u>0</u>	<u>0</u>
Driveways	<u>0</u>	<u>0</u>
Sidewalks/paths	<u>0</u>	<u>0</u>
Rooftops	<u>0</u>	<u>0</u>
Decks	<u>0</u>	<u>0</u>
Swimming pools/ponds	<u>0</u>	<u>0</u>
Other	<u>0</u>	<u>0</u>
Impervious Surface Area	<u>0</u>	<u>0</u>

SWM Credit Area = 0

Total Prop. Impervious = 0

3) Imperviousness (I)

Existing Imperviousness, I pre

= Impervious Surface area / Site Area

= (Step 2a) / (Step 1)

= 0 / 0.59

= 0 %

Proposed Imperviousness, I post

= Impervious Surface area / Site Area

= (Step 2a) / (Step 1)

= 0 / 0.59

= 0 %

B: Define Development Category (circle)

- 1) New Development: Existing impervious less than 15% I (Go to step 2A)
- 2) ReDevelopment: Existing impervious of 15% I or more (Go to step 2B)
- 3) Single Lot residential Development: Single lots being developed or improved; single family residential development; and more than 250 sf of impervious area and associated disturbance (Go to Section 5, Residential Approach, for detailed criteria and requirements)

Note: All acrages used in this worksheet refers to areas within the IDA of the Critical Area only

Step2: Calculate the Predevelopment Load (L_{pre})

A: New Development

$$L_{pre} = (0.5) (A)$$

$$= (0.5) \times \frac{0.59}{0.30} \text{ lbs/year of total phosphorus}$$

Where:

- L_{pre} = Average annual load of total phosphorus exported from the site prior to development (lbs/year)
- 0.5 = Annual total phosphorus load from undeveloped lands (lbs/acre/yr)
- A = Area of the site within the Critical Area IDA (acres)

B: ReDevelopment:

$$L_{pre} = (R_v) (C) (A) (8.16)$$

$$R_v = 0.05 + 0.009(I_{pre})$$

$$0.05 + 0.009 \times 0 = \boxed{0.05}$$

$$L_{pre} = 0.00 \times 0.30 \times 0.59 \times 8.16 =$$

$$= \underline{0.000} \text{ lbs/year of total phosphorus}$$

- L_{pre} = Average annual load of total phosphorus exported from the site prior to development (lbs/year)
- R_v = Run off coefficient, which expresses the fraction of rainfall which is converted to runoff
- I_{pre} = Pre-development (existing) site impervious (i.e., $I=75$ if the site is 75% impervious)
- C = Flow-weighted mean concentration of the pollutant (total phosphorus) in urban runoff (mg/l) = 0.30 mg/l
- A = Area of the site within the Critical Area IDA (acres)
- 8.16 = Includes regional constants and unit conversion factors

Step3: Calculate the Post-Development Load (L_{post})**A: New Development and Redevelopment:**

$$L_{\text{post}} = (R_v) (C) (A) (8.16)$$

$$R_v = 0.50 + 0.009 (I_{\text{post}})$$

$$= 0.05 + 0.009 \quad 0 \quad = 0.05$$

$$L_{\text{post}} = 0.05 \times 0.30 \times 0.59 \times 8.16 =$$

$$= \underline{0.072} \text{ lbs/year of total phosphorus}$$

Where:

L_{post} = Average annual load of total phosphorus exported from the site post-development (lbs/year)

R_v = Run off coefficient, which expresses the fraction of rainfall which is converted to runoff

I_{post} = Post-development (proposed) site impervious (i.e., $I=75$ if the site is 75% impervious)

C = Flow-weighted mean concentration of the pollutant (total phosphorus) in urban runoff (mg/l) = 0.30 mg/l

A = Area of the site within the Critical Area IDA (acres)

8.16 = Includes regional constants and unit conversion factors

Step4: Calculate the Pollutant Removal Requirement (RR)

$$RR = L_{\text{post}} - (0.90) (L_{\text{pre}})$$

$$= 0.07 - 0.90 \times 0.30 =$$

$$= \underline{-0.193} \text{ lbs/year of total phosphorus}$$

Where:

RR = Pollutant removal requirement (lbs/year)

L_{post} = Average annual load of total phosphorus exported from the site prior to development (lbs/year)

L_{pre} = Average annual load of total phosphorus exported from the site prior to development (lbs/year)

Step5: Identify Feasible BMP's

Select BMP Options using the screening matrices provided in the chapter 4 of the 2000 Maryland Stormwater Design Manual. Calculate the load removed for each option.

BMP Type	(Lpost)	<input checked="" type="checkbox"/> (BMP re)	<input checked="" type="checkbox"/> (% DA Served)	=	
				=	0 (lbs/year)
				=	0 (lbs/year)
				=	0 (lbs/year)
				=	0 (lbs/year)
Load Removed, LR (total)				=	0.000 (lbs/year)
Pollutant Removal Required, RR (from step 4)				=	-0.193 (lbs/year)
Remaning Pollutant load				=	-0.193 (lbs/year)

Where:

- Load removed, LR = Annual total phosphorus removed By the Proposed BMP's (lbs/year)
- L post = Average annual load of total phosphorus exported from the site prior to develpoment (lbs/year)
- BMP re = BMP removal efficiency for total phophorus Table 4.8 (%)
- % DA Served = Fraction of the site area with in the critical area IDA served by the BMP(%)
- RR = Pollutant removal requirement (lbs/year)

If the Load Removed is equal to or greater than the Pollutant Removal Required Computed in step 4, then the on-site BMP complies with the 10% Rule.

Has the RR (pollutant removal requirment) been met? ☐ Yes ☐ No

WORKSHEET A: Standard Application Process

Calculate Pollutant Removal Requirments

Project Name: BAY EAST DEVELOPMENT

Date: Feb-10

Step1: Calculate Existing and Proposed Site Impervious

A: Calculate Percent Imperviousness

- 1) Site Area within the Critical Area IDA A= 0.420 acres Offsite Drainage
- 2) Site ImperviousSurface Area, Existing and Proposed
(See table 4.1 for details)

(a) Existing (acres)

(b) Proposed (acres)

Roads		
Parking lots	<u>0.26</u>	<u>0.36</u>
Driveways	<u>0</u>	<u>0</u>
Sidewalks/paths	<u>0</u>	<u>0</u>
Rooftops	<u>0</u>	<u>0</u>
Decks	<u>0</u>	<u>0</u>
Swimming pools/ponds	<u>0</u>	<u>0</u>
Other	<u>0</u>	<u>0</u>
Impervious Surface Area	<u>0.26</u>	<u>0.36</u>

SWM Credit Area = 0

Total Prop. Impervious= 0.36

3) Imperviousness (I)

Existing Imperviouness, I pre

$$\begin{aligned} &= \text{Impervious Surface area} / \text{Site Area} \\ &= (\text{Step 2a}) / (\text{Step1}) \\ &= \frac{0.26}{0.42} \\ &= \underline{61.9} \% \end{aligned}$$

Proposed Imperviouness, I post

$$\begin{aligned} &= \text{Impervious Surface area} / \text{Site Area} \\ &= (\text{Step 2a}) / (\text{Step1}) \\ &= \frac{0.36}{0.42} \\ &= \underline{85.71} \% \end{aligned}$$

B: Define Development Category (circle)

- 1) New Development: Existing impervious less then 15% I (Go to step 2A)
- 2) ReDevelopment: Existing impervious of 15% I or more (Go to step 2B)
- 3) Single Lot residential Development: Single lots being developed or improved; single family residential development; and more than 250 sf of impervious area and associated disturbance (Go to Section 5, Residential Approach, for detailed criteria and requirments)

Note: All acrages used in this worksheet refers to areas within the IDA of the Critical Area only

Step2: Calculate the Predevelopment Load (L_{pre})

A: New Development

$$L_{pre} = (0.5) (A)$$

$$= (0.5) \times \frac{0}{0} \text{ lbs/year of total phosphorus}$$

Where:

- L_{pre} = Average annual load of total phosphorus exported from the site prior to development (lbs/year)
- 0.5 = Annual total phosphorus load from undeveloped lands (lbs/acre/yr)
- A = Area of the site within the Critical Area IDA (acres)

B: ReDevelopment:

$$L_{pre} = (R_v) (C) (A) (8.16)$$

$$R_v = 0.05 + 0.009(I_{pre})$$

$$0.05 + 0.009 \times 61.9 = 0.61$$

$$L_{pre} = 0.61 \times 0.30 \times 0.42 \times 8.16 =$$

$$= 0.624 \text{ lbs/year of total phosphorus}$$

- L_{pre} = Average annual load of total phosphorus exported from the site prior to development (lbs/year)
- R_v = Run off coefficient, which expresses the fraction of rainfall which is converted to runoff
- I_{pre} = Pre-development (existing) site impervious (i.e., $I=75$ if the site is 75% impervious)
- C = Flow-weighted mean concentration of the pollutant (total phosphorus) in urban runoff (mg/l) = 0.30 mg/l
- A = Area of the site within the Critical Area IDA (acres)
- 8.16 = Includes regional constants and unit conversion factors

Step3: Calculate the Post-Development Load (Lpost)

A: New Development and Redevelopment:

$$L_{\text{post}} = (R_v) (C) (A) (8.16)$$

$$R_v = 0.50 + 0.009 (I_{\text{post}})$$

$$= 0.05 + 0.009 \quad 85.71 \quad = 0.82$$

$$L_{\text{post}} = 0.82 \times 0.30 \times 0.42 \times 8.16 =$$

$$= \underline{0.845} \text{ lbs/year of total phosphorus}$$

Where:

L_{post} = Average annual load of total phosphorus exported from the site post-development (lbs/year)

R_v = Run off coefficient, which expresses the fraction of rainfall which is converted to runoff

I_{post} = Post-development (proposed) site impervious (i.e., $I=75$ if the site is 75% impervious)

C = Flow-weighted mean concentration of the pollutant (total phosphorus) in urban runoff (mg/l) = 0.30 mg/l

A = Area of the site within the Critical Area IDA (acres)

8.16 = Includes regional constants and unit conversion factors

Step4: Calculate the Pollutant Removal Requirement (RR)

$$RR = L_{\text{post}} - (0.90) (L_{\text{pre}})$$

$$= 0.84 - 0.90 \times 0.62 =$$

$$= \underline{0.283} \text{ lbs/year of total phosphorus}$$

Where:

RR = Pollutant removal requirement (lbs/year)

L_{post} = Average annual load of total phosphorus exported from the site prior to development (lbs/year)

L_{pre} = Average annual load of total phosphorus exported from the site prior to development (lbs/year)

STORMWATER MANAGEMENT NARRATIVE
For
BAY EAST DEVELOPMENT CORP.

The subject site is located to the north of the Kent Narrows Bridge adjacent to the Queen Ann's County Public Landing on Piney Narrows Road.

The site currently exists as an active dredge spoils site of approximately 6.237 acres more or less. The site as mentioned above is located adjacent to the Queen Ann's public landing and takes access from the existing landing parking lot. The site is also bordered by tidally influenced waters on three sides which receive runoff in the form of sheet flow from multiple areas on site. Onsite soils as scaled from the Queen Anne's County Soil surveys indicate that all on site soils conform to hydrologic soils group 'D'.

The site has proposed an age restricted multiplex planned development which consists of (31) units in a townhouse style condominium regime, (10) condominium units, a 4,352 sq.ft commercial building and (8) commercial units with residential above. Due to the limited amount of existing impervious coverage the site will be analyzed as a new developed site for stormwater management. Due to the proximity of tidal waters Section 14-409 B(1) exempts the site from providing stormwater management water quantity control as a result of direct discharge to tidal waters. Although the site is exempt for water quantity control stormwater management for water quality will be required in accordance with the Queen Anne's County ESD manual. Stormwater management for water quality control will be met through the use of surface sand filters, flow thru stormwater planters and four CONTECH "StormFilter" Chambers. As a result of the site being located entirely in the Critical Area were feasible the stormwater bmp's have been designed in series to provide additional water quality. All stormwater runoff has been designed to be conveyed through closed storm drain to the outfall locations due to the site elevation requirements in the flood plain.

The proposed stormwater management water quality control devices will be design to meet WQv, Rev, and safely convey runoff to tidal water. The proposed stormwater management water quality devices have be designed in accordance with the Maryland Department of The Environment Stormwater Management Guidelines, and the Queen Anne's County Stormwater Management Ordinance.

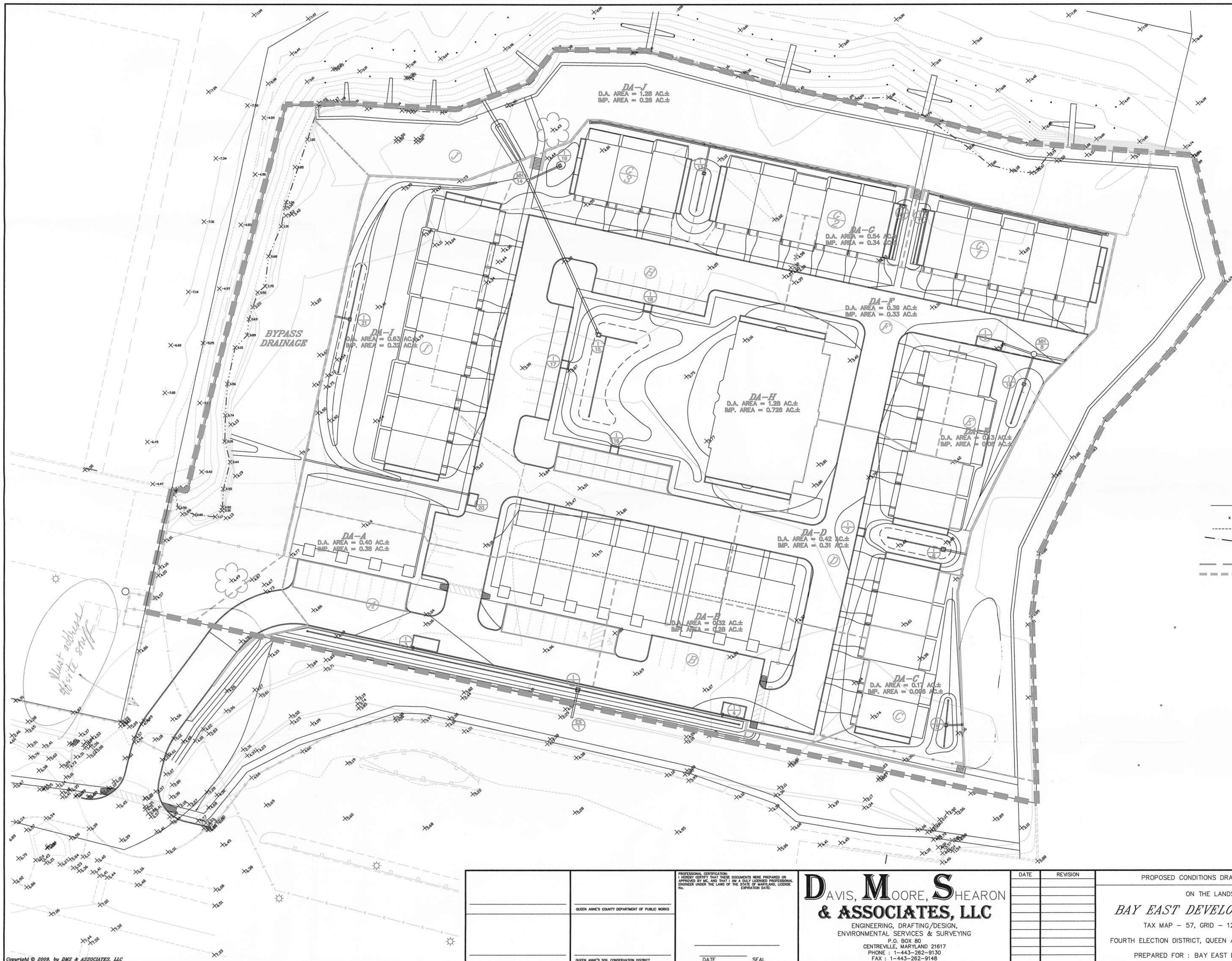
NON-STRUCTURAL
AND
ESD PRACTICE SUMMARY

As part of the new Queen Anne's County Stormwater Management Ordinance the use of non-structural and Environmentally Sensitive Design (ESD) practices must be incorporated in the site design of all developed sites. The purpose of these design techniques is to enhance and preserve the hydrologic function of the site while providing essential water quality and water quantity stormwater management.

The proposed development of the Queen Anne's County Medical Park will incorporate into the site grading design flow thru stormwater planter, surface sand filters, and CONTECH "StormFilters" to treat all of the water quality needs for the developed site.

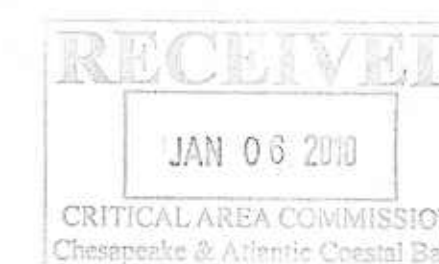
Due to the need for BMP's in a series to treat water quality flow thru stormwater planter have been designed adjacent to the buildings to provide the primary water quality treatment for roof runoff. Due to lack of topographic relief and set back requirements the flow thru stormwater planter offers an excellent water quality filter for treatment of roof runoff. The second method for treating water quality will be the use of a surface sand filter which will be planted similarly to a bioretention. Sand filters will treat the largest drainage area which makes them an excellent water quality filter practice. All surface sand filter areas will be designed with an under drain system and connected to the onsite closed storm drain system for conveyance to the site outfall locations. The surface sand filter facilities have been designed to treat impervious areas associated with the proposed buildings and parking lot. In areas where surface sand filter facilities and flow thru planter can not be effectively implemented CONTECH "StormFilter" will be implemented to treat the remaining impervious coverage associated with the proposed road. The "StormFilter" system utilizes a filter cartridge to filter contaminants from the stormwater runoff. Porous pavement has not been designed for this site as a result of compacted fill required to bring the site in compliance with the flood plain.

Due to the site development requirements the most efficient and economical methods to provide stormwater management water quality control while meeting the requirement for non-structural and ESD stormwater management practices are the use of flow thru stormwater planters, surface sand filter facilities and CONTECH "StormFilters".



LEGEND

- DEED POINT
- EXISTING SPOT ELEVATION
- EXISTING CONTOUR
- EXISTING SOILS BOUNDARY
- EXISTING UTILITY POLE
- PROPOSED DRAINAGE AREA
- PROPOSED SUBDRAINAGE AREA



QUEEN ANNE'S COUNTY DEPARTMENT OF PUBLIC WORKS	QUEEN ANNE'S SOIL CONSERVATION DISTRICT
--	---

PROFESSIONAL CERTIFICATION:
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR
APPROVED BY ME, AND THAT I AM A FULLY LICENSED PROFESSIONAL
ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE
NO. _____ EXPIRATION DATE _____

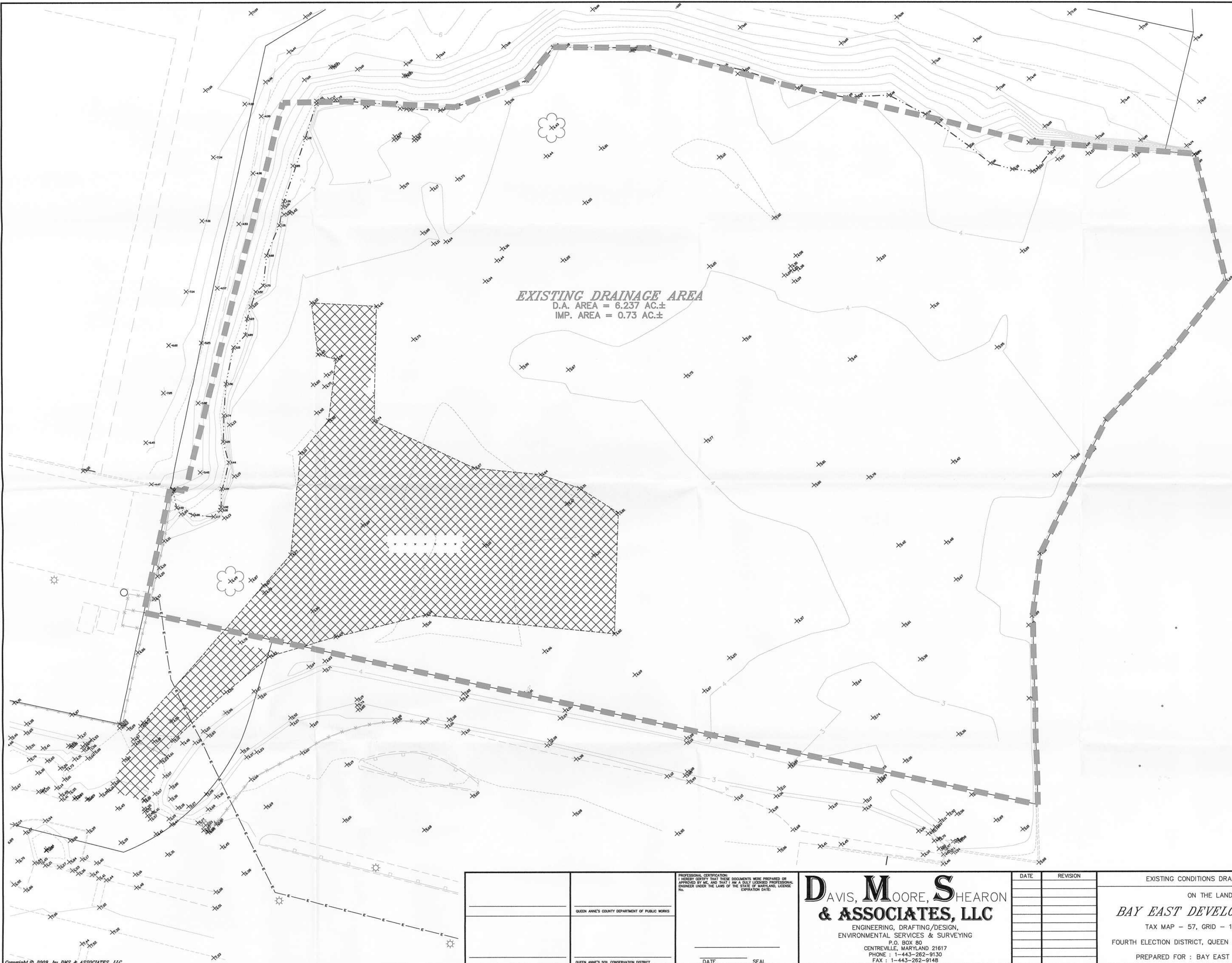
DATE _____ SEAL _____

**DAVIS, MOORE, SHEARON
& ASSOCIATES, LLC**
ENGINEERING, DRAFTING/DESIGN,
ENVIRONMENTAL SERVICES & SURVEYING
P.O. BOX 80
CENTREVILLE, MARYLAND 21617
PHONE : 1-443-262-9130
FAX : 1-443-262-9148

DATE	REVISION

PROPOSED CONDITIONS DRAINAGE AREA MAP
ON THE LANDS OF
BAY EAST DEVELOPMENT CORP.
TAX MAP - 57, GRID - 12, PARCEL - 429
FOURTH ELECTION DISTRICT, QUEEN ANNE'S COUNTY, MARYLAND
PREPARED FOR : BAY EAST DEVELOPMENT CORP.

DATE	SCALE
DEC. '09	1" = 30'
JOB No. 2004081	DRAWN BY WJM
FOLDER Ref.	DESIGNED BY WTD, Jr.
SHEET No. - DAPR	
CADD FILE - 08076DA PR	



RECEIVED
JAN 03 2010
CRITICAL AREA COMMISSION
Chesapeake & Atlantic Coastal Bays

	QUEEN ANNE'S COUNTY DEPARTMENT OF PUBLIC WORKS
	QUEEN ANNE'S SOIL CONSERVATION DISTRICT

PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE No. _____ EXPIRATION DATE _____
DATE _____ SEAL _____

DAVIS, MOORE, SHEARON & ASSOCIATES, LLC
ENGINEERING, DRAFTING/DESIGN,
ENVIRONMENTAL SERVICES & SURVEYING
P.O. BOX 80
CENTREVILLE, MARYLAND 21617
PHONE : 1-443-262-9130
FAX : 1-443-262-9148

DATE	REVISION

EXISTING CONDITIONS DRAINAGE AREA MAP
ON THE LANDS OF
BAY EAST DEVELOPMENT CORP.
TAX MAP - 57, GRID - 12, PARCEL - 429
FOURTH ELECTION DISTRICT, QUEEN ANNE'S COUNTY, MARYLAND
PREPARED FOR : BAY EAST DEVELOPMENT CORP.

DATE DEC. '09	SCALE 1" = 30'
JOB No. 2004081	DRAWN BY WJM
FOLDER Ref.	DESIGNED BY WTD, Jr.
SHEET No. - DAEX	
CADD FILE - 08076DAEX	

PLANT SPACING AS SPECIFIED, REFER TO PLANT LIST FOR SPACING.

INTERMEDIATE HERBACEOUS PLANT AS SPECIFIED PER PLANS. IF MORE THAN ONE PLANT IS SPECIFIED THEN THEY SHALL BE EVENLY DISTRIBUTED IN THE SPECIFIED AREA. REFER TO PLANT LIST FOR SPECIE AND SPACING.

HERBACEOUS VEGETATION PLANTING PATTERN

PLANTING SPECIFICATIONS

A. MATERIALS

(1) PLANTS SHALL BE NURSERY GROWN IN ACCORDANCE WITH GOOD HORTICULTURAL PRACTICES, AND GROWN UNDER CLIMATIC CONDITIONS SIMILAR TO THOSE IN THE LOCALITY OF THE PROJECT. THEY SHALL HAVE BEEN ROOT PRUNED WITHIN THE LAST TWO YEARS.

THEY SHALL BE SOUND, HEALTHY AND VIGOROUS, WELL BRANCHED AND DENSELY FOLIATED WHEN IN LEAF. THEY SHALL BE FREE OF DISEASE, PEST, EGGS OR LARVAE, AND SHALL HAVE A HEALTHY, DEVELOPED ROOT SYSTEM.

PLANTS SHALL NOT BE PRUNED BEFORE DELIVERY. TREES WITH A DAMAGED OR CROOKED LEADER OR MULTIPLE LEADERS, ABRASIONS ON THE BARK, SUNSCALD, DISFIGURING KNOTS OR FRESH CUTS OVER 1 1/2" WILL BE REJECTED.

NO CHANGE IN QUANTITY, SIZE, KIND OR QUALITY OF PLANT SPECIFIED WILL BE PERMITTED WITHOUT THE APPROVAL OF THE LANDSCAPE ARCHITECT/DESIGNER. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE PLANT COUNT AND IN ANY INSTANCE WHERE THERE IS A DISCREPANCY BETWEEN THE PLAN VIEW AND THE LANDSCAPE SCHEDULE, THE PLAN VIEW SHALL PRESEDE.

(2) TOPSOIL SHALL BE FERTILE, FRIABLE AND TYPICAL OF THE LOCALITY; IT SHALL BE FREE OF STONES, LUMPS, PLANTS, ROOTS, STICKS AND SHALL NOT BE DELIVERED IN A FROZEN OR MUDDY CONDITION.

(3) PLANTING SOIL (BACKFILL MIX) SHALL BE FIVE PARTS TOPSOIL AND ONE PART WET LOOSE PEATMOSS.

(4) STAKING MATERIALS: GUY WIRE SHALL BE PUJABLE 12 GAUGE GALVANIZED TWISTED TWO STRAND WIRE. HOSE SHALL BE A SUITABLE LENGTH OF TWO-PLY, REINFORCED BLACK RUBBER HOSE 3/4" INCH IN DIAMETER; STAKES SHALL CONFORM TO THE DETAIL ON THIS SHEET.

B. APPLICABLE SPECIFICATIONS AND STANDARDS:

(1) "STANDARDIZED PLANT NAMES," LATEST EDITION AMERICAN JOINT COMMITTEE ON HORTICULTURAL NOMENCLATURE.

(2) "AMERICAN STANDARD FOR NURSERY STOCK," LATEST EDITION, AMERICAN ASSOCIATION OF NURSERYMEN.

C. DIGGING AND HANDLING OF PLANT MATERIALS:

(1) IMMEDIATELY BEFORE DIGGING, SPRAY ALL EVERGREEN OR DECIDUOUS PLANT MATERIAL IN FULL LEAF WITH ANTI-DESICCANT, APPLYING AN ADEQUATE FILM OVER TRUNKS, BRANCHES, TWIGS, AND/OR FOLIAGE.

(2) DIG B&B (B&B) PLANTS WITH FIRM NATURAL BALLS OF EARTH, OF DIAMETER NOT LESS THAN THAT RECOMMENDED BY AMERICAN STANDARD FOR NURSERY STOCK, AND IF SUFFICIENT DEPTH TO INCLUDE THE FIBROUS AND FEEDING ROOTS. PLANTS MOVED WITH A BALL WILL NOT BE ACCEPTED IF THE BALL IS CRACKED OR BROKEN BEFORE OR DURING PLANTING OPERATIONS.

D. EXCAVATION OF PLANTING AREAS:

STAKE OUT ON THE GROUND LOCATIONS FOR PLANTS AND OUTLINES OF AREA TO BE PLANTED AND OBTAIN APPROVAL OF THE LANDSCAPE ARCHITECT/DESIGNER BEFORE EXCAVATION IS BEGUN. CONTRACTOR IS TO CAUTIOUSLY TEST PIT AREAS WHERE UNDERGROUND UTILITIES (ELECTRIC, GAS, CABLE/COMMUNICATIONS LINES, WATER LINES, SEWER, ROOF LEADERS, STORM DRAIN PIPE, ETC.) ARE SUSPECTED TO EXIST AND WHERE PROPOSED TO BE PLACED ACCORDING TO PLAN TO AVOID ANY DAMAGE OR DISRUPTIONS TO SERVICES. DO NOT PLACE PLANTS DIRECTLY OVER ANY EXISTING UNDERGROUND UTILITIES. OFFSET A REASONABLE AND PRACTICAL DISTANCE TO AVOID ANY IMMINENT OR FUTURE CONFLICT.

E. PLANTING OPERATIONS:

SET PLANTS AT SAME RELATIONSHIP TO FINISHED GRADE AS THEY BORE TO THE GROUND FROM WHICH THEY WERE DUG. USE PLANTING SOIL TO BACKFILL APPROXIMATELY 2/3 FULL, WATER THOROUGHLY BEFORE INSTALLING REMAINDER OF THE PLANTING SOIL TO TOP OF PIT, ELIMINATING ALL AIR POCKETS.

SET PLANTS PLUMB AND BRACE RIGIDLY IN POSITION UNTIL THE PLANTING SOIL HAS BEEN STAMPED SOLIDLY AROUND THE BALL AND ROOTS. CUT ROPES OR STRINGS FROM TOP OF BALL AFTER PLANT HAS BEEN SET. LEAVE BURLAP OR CLOTH WRAPPING INTACT AROUND BALLS. TURN UNDER AND BURY PORTIONS OF BURLAP AT TOP OF BALL.

PROTECT PLANTS AT ALL TIMES FROM SUN OR DRYING WINDS. PLANTS THAT CANNOT BE PLANTED IMMEDIATELY ON DELIVERY SHALL BE KEPT IN THE SHADE, WELL PROTECTED WITH SOIL, WET MOSS OR OTHER ACCEPTABLE MATERIAL AND SHALL BE KEPT WELL WATERED.

PLANTS SHALL NOT REMAIN UNPLANTED FOR LONGER THAN THREE DAYS AFTER DELIVERY. PLANTS SHALL NOT BE BOUND WITH WIRE OR ROPE AT ANY TIME SO AS TO DAMAGE THE BARK OR BREAK BRANCHES. PLANTS SHALL BE LIFTED AND HANDLED FROM THE BOTTOM OF THE BALL ONLY.

MULCH ALL PITS AND BEDS WITH A TWO INCH LAYER OF BARKMULCH IMMEDIATELY AFTER PLANTING AND WORK INTO THE TOP THREE INCHES OF THE PLANTING SOIL. FORM A 3" EARTH SAUCER AROUND EACH PLANT. WATER ALL PLANTS IMMEDIATELY AFTER PLANTING.

F. STAKING AND PRUNING:

STAKING SHALL BE COMPLETED IMMEDIATELY AFTER PLANTING. PLANTS SHALL STAND PLUMB AFTER STAKING. STAKES AND GUY WIRES SHALL BE REMOVED AT THE END OF THE GUARANTEE PERIOD AND DISPOSED OF OFF SITE BY THE CONTRACTOR.

REMOVE ALL DEAD WOOD, SUCKERS, OR BROKEN BRANCHES AND PRESERVE THE NATURAL CHARACTER OF THE PLANT.

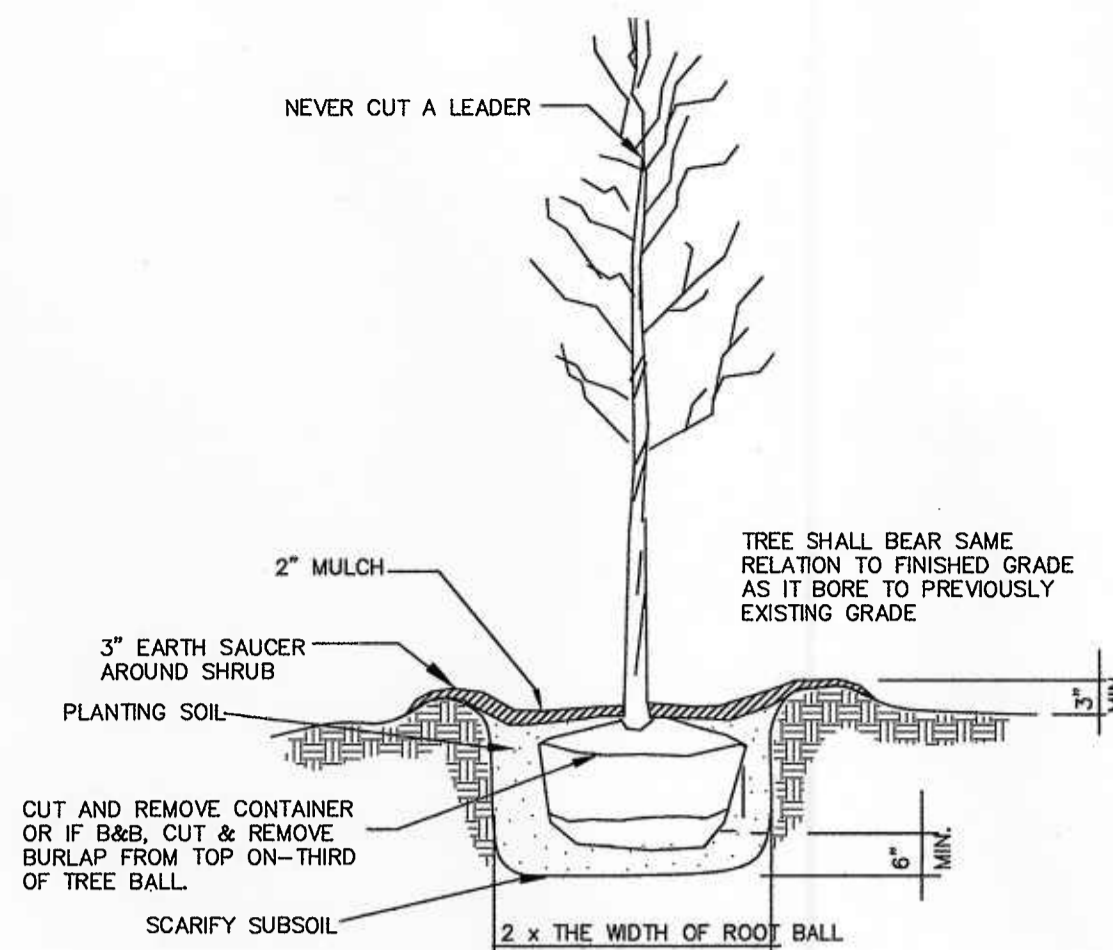
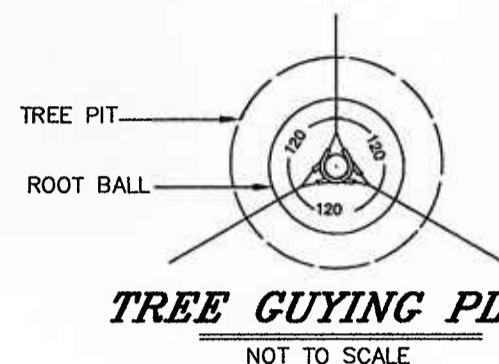
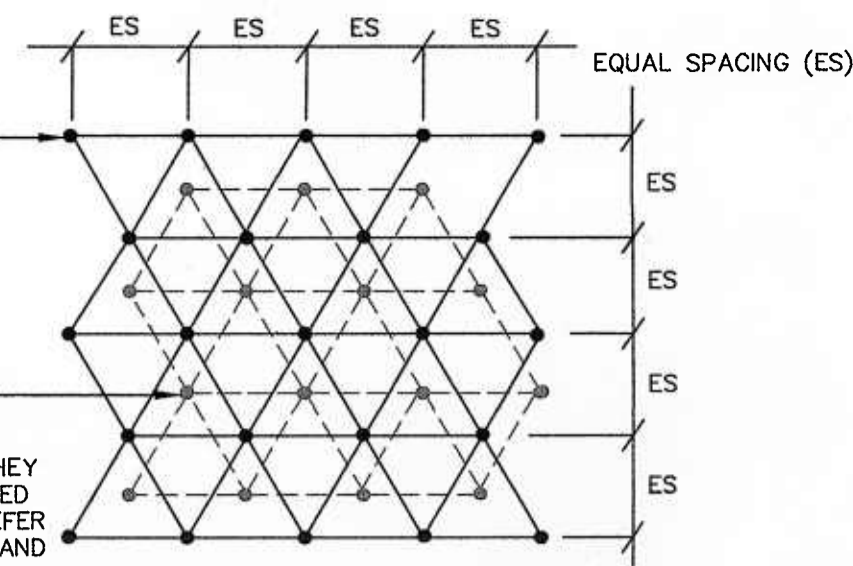
G. GUARANTEE:

ALL PLANT MATERIALS SHALL BE GUARANTEED FOR TWO (2) FULL YEARS FROM THE DATE THAT THE LANDSCAPE INSTALLATION IS ACCEPTED AS COMPLETE. PLANT MATERIAL NOT FOUND TO BE IN A HEALTHY, VIGOROUS CONDITION AT THE BEGINNING OF THE SECOND GROWING SEASON IS TO BE REPLACED.

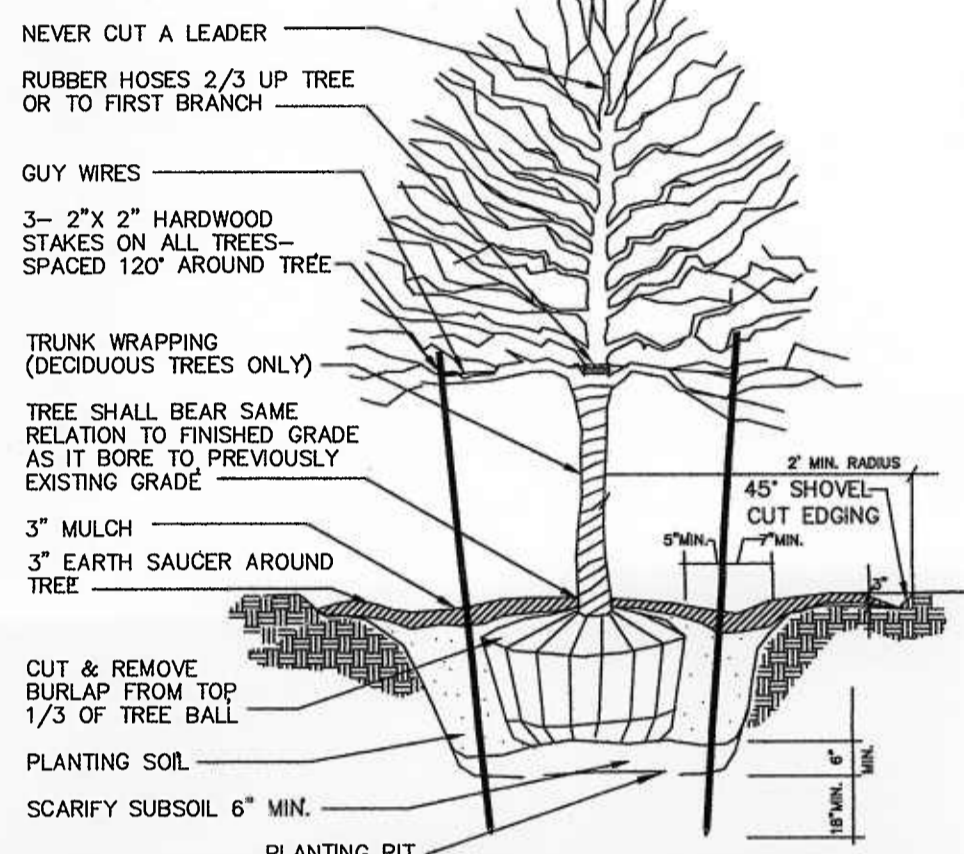
H. SEEDING: ALL AREAS REMAINING DISTURBED AFTER CONSTRUCTION, PAVING AND INSTALLATION OF THE LANDSCAPING ARE TO BE SEED.

- SEED BED PREPARATION: APPLY 25LBS. OF 10-10-10 FERTILIZER PER 1000 SQ.FT. HARROW OR DISC INTO SOIL TO A DEPTH OF 3-4 INCHES. APPLY PULVERIZED GROUND LIMESTONE, SOLES. PER 1000 SQ. FT.
- SEEDINGS: APPLY 4.5LBS PER 1000 SQ. FT. OF KENTUCKY 31 TALL FESCUE OR A SUITABLE COMPARABLE MIX ON A MOIST SEED BED WITH SUITABLE EQUIPMENT.
- MULCHING: IMMEDIATELY AFTER SEEDING, UNIFORMLY MULCH ENTIRE AREA WITH UNDERWEATHERED SMALL GRAIN STRAW AT A RATE OF 1 1/2"-2" TONS PER ACRE.

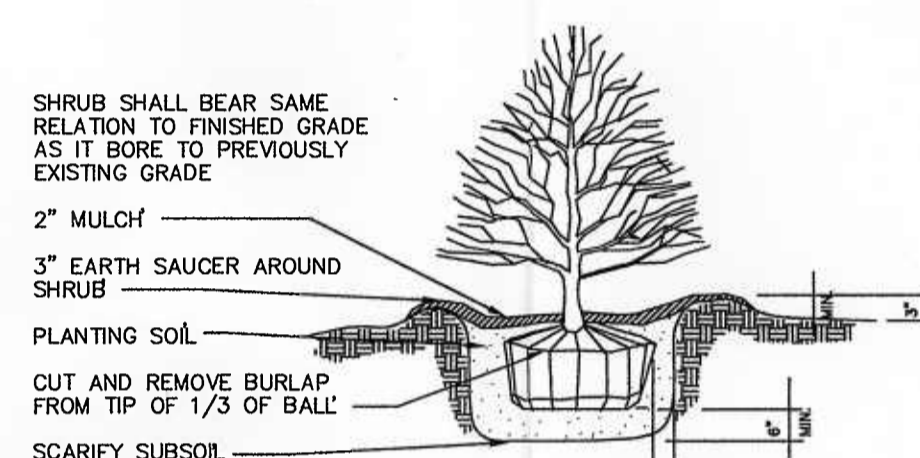
FOR BEST RESULTS, SEEDING SHOULD BE PERFORMED BETWEEN FEB. 1ST AND APRIL 30TH OR AUG. 15TH TO OCT. 31ST.



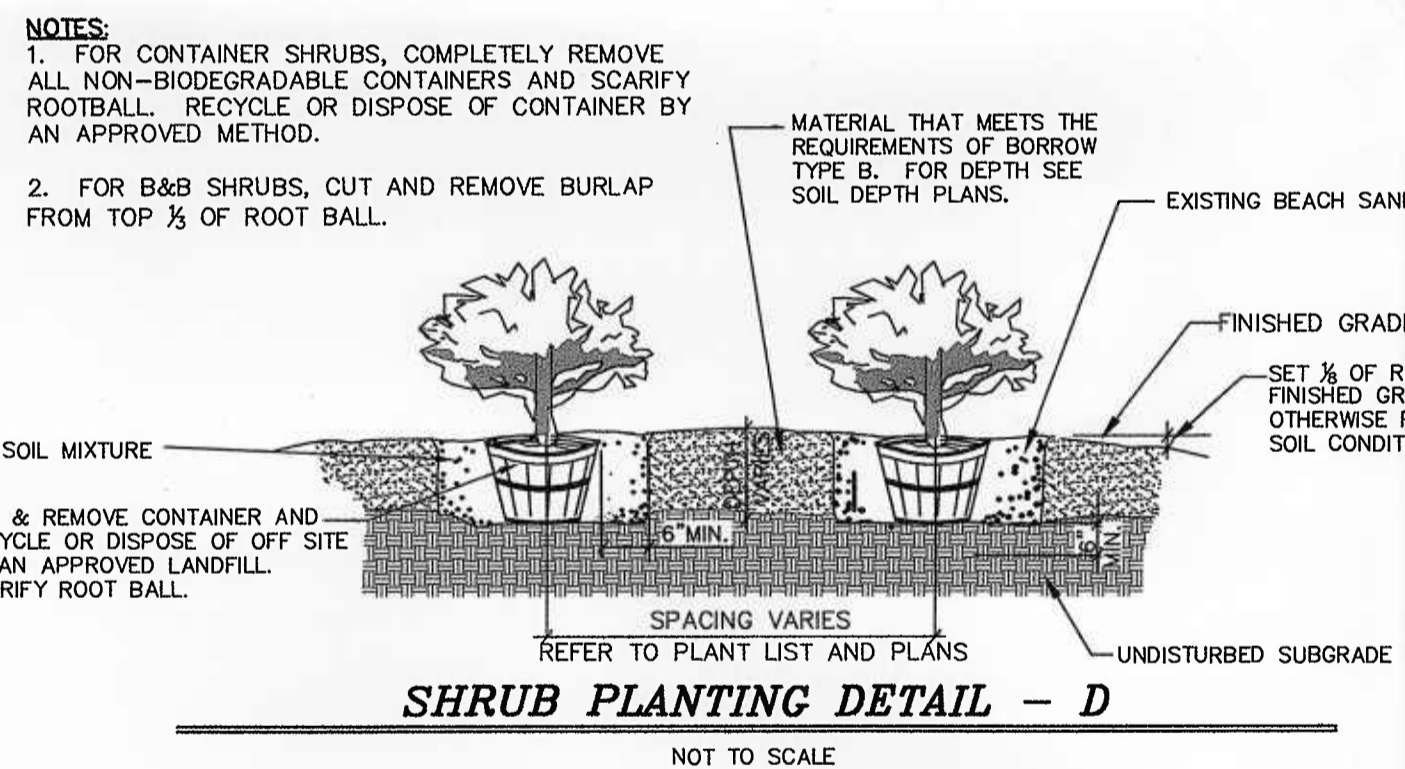
DETAIL A
B&B/CONTAINER GROWN WHIP PLANTING



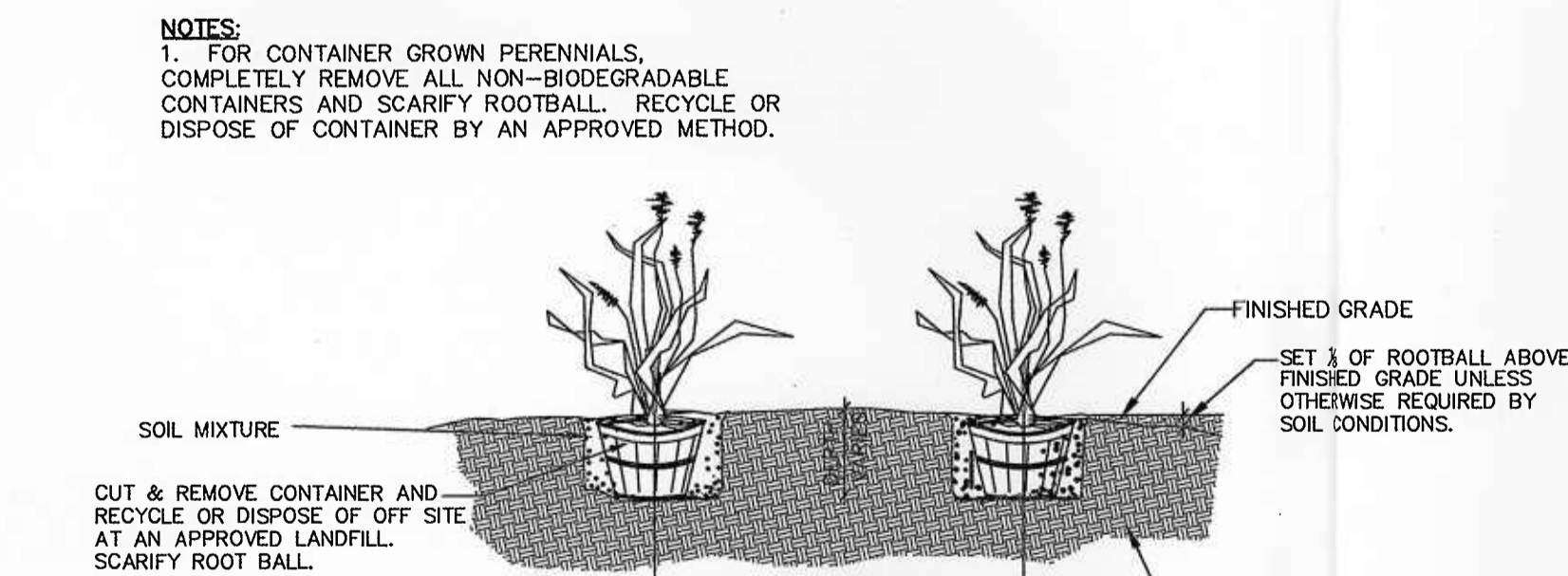
TREE PLANTING DETAIL - B



SHRUB PLANTING DETAIL - C



SHRUB PLANTING DETAIL - D



HERBACEOUS PERENNIAL PLANTING DETAIL - E

LANDSCAPE CALCULATIONS

REQUIRED SITE LANDSCAPING (SEE SECTIONS 18.1-26.K(5) & 18.1-71.B):

THE WVC ZONES REQUIRES NO SPECIFIC NUMBER OF PLANTS BE PROVIDED FOR NEW DEVELOPMENT IN THE WVC ZONE. HOWEVER, THE WVC ZONE AND THE LANDSCAPING STANDARD SECTIONS OF THE COUNTY CODE REQUIRE SITE LANDSCAPING IN ACCORDANCE WITH DESIGN GUIDELINES OUTLINED IN SECTION 18.1-26.K(5) AND 18.1-71.B.

BUFFER EXEMPTION AREA MITIGATION

NET INCREASE OF IMPERVIOUS SURFACE IN THE 0'-100' CRITICAL AREA BUFFER
TOTAL AREA WITHIN THE 0'-100' CRITICAL AREA BUFFER

NET INCREASE OF IMPERVIOUS SURFACE IN THE 50'-100' CRITICAL AREA BUFFER
REQUIRED BUFFER EXEMPTION AREA MITIGATION (2:1 RATIO) =
AREA ON SITE PROVIDED FOR MITIGATION OF INCREASE OF IMPERVIOUS SURFACE WITHIN THE 100' CRITICAL AREA BUFFER = 0.577 AC.±
TOTAL NUMBER OF 4'-6' CONTAINER GROWN TREES REQUIRED TO BE PLANTED = 1.471 AC.±
(70- 4'-6' CONTAINER GROWN TREES AT 2:1 RATIO REQUIRED PER ACRE OF REQUIRED BUFFER EXEMPTION MITIGATION AREA) = 0.417 AC.±
= 0.834 AC.±

TOTAL AREA WITHIN THE 0'-50' CRITICAL AREA BUFFER (BUFFER EXEMPT AREA)
NET INCREASE OF IMPERVIOUS SURFACE IN THE 0'-50' CRITICAL AREA BUFFER
REQUIRED BUFFER EXEMPTION AREA MITIGATION (3:1 RATIO) =

INCREASE OF IMPERVIOUS SURFACE WITHIN THE 100' CRITICAL AREA BUFFER (INCLUDES MITIGATION AREA REQUIRED FOR DISTURBANCE IN THE 50'-100' BUFFER) = 1.628 AC.±
TOTAL NUMBER OF 4'-6' CONTAINER GROWN TREES REQUIRED TO BE PLANTED = 0.160 AC.±
(70- 4'-6' CONTAINER GROWN TREES AT 3:1 RATIO REQUIRED PER ACRE OF REQUIRED BUFFER EXEMPTION MITIGATION AREA) = 0.490 AC.±
= 1.314 AC.±

TOTAL NUMBER OF 4'-6' CONTAINER GROWN TREES REQUIRED TO BE PLANTED IN THE 0'-50' CRITICAL AREA BUFFER = 33.6 or 34 TREES

TOTAL NUMBER OF 4'-6' CONTAINER GROWN TREES PROVIDED IN THE 0'-50' CRITICAL AREA BUFFER = 92 TREES

PER SECTION 14.1-54.A. OF THE COUNTY CODE REGARDING DIVERSE FOREST PLANTING, THE FOLLOWING MIX OF CANOPY, UNDERSTORY AND SHRUB PLANT LAYERS IS PROPOSED: = 92 TREES

50 CANOPY TREES

20 UNDERSTORY TREES

110 SHRUBS (22 CANOPY TREES X 5 = 110 SHRUBS)
(PROPOSED RATIO OF SHRUBS FOR TREES = 5:1)

MITIGATION PER 10% POLLUTANT OFFSET PER CRITICAL AREA COMMISSION

SQUARE FOOTAGE OF REMAINING POLLUTANT LOAD: 7,000 SQ. FT.
ON-SITE MITIGATION IS PROVIDED IN ACCORDANCE WITH THE CRITICAL AREA'S TOXIC MANUAL. THE REMAINING POUNDAGE OF POLLUTANT LOAD IS CONVERTED TO SQUARE FOOTAGE AND PLANTS ARE PROVIDED WITHIN THE BUFFER AT THE FOLLOWING RATE: 3,500 SQ. FT.

REMAINING SQUARE FOOTAGE OF POLLUTANT LOAD: 3,500 SQ. FT.
(CREDIT PERMITTED FOR 350 SQ. FT. = A CLUSTER OF 2 UNDERSTORY TREES AND EITHER 3 LARGE SHRUBS OR 6 SM. SHRUBS)

350 = 10 PLANT CLUSTERS X 2 UNDERSTORY TREES = 20 REQUIRED UNDERSTORY TREES
5 PLANT CLUSTERS X 3 LARGE SHRUBS = 15 LARGE SHRUBS
5 PLANT CLUSTERS X 6 SMALL SHRUBS = 30 SMALL SHRUBS

REQUIRED TO BE PLANTED IN THE BUFFER TO SATISFY THE 10% POLLUTANT LOAD CALCULATIONS:
1,750 QT. SIZE HERBACEOUS PERENNIALS
20 UNDERSTORY TREES
15 LARGE SHRUBS
30 SMALL SHRUBS

LANDSCAPE SCHEDULE

KEY	BOTANICAL NAME	COMMON NAME	QTY.	SIZE	CONTAINER	SPACING	DETAIL
TREES :							
**Ac	<i>Amelanchier canadensis</i>	Shadblow Serviceberry	7	Multi-stem, 6'-7' tall	B&B	AS SHOWN	Per Detail A
**Ar	<i>Acer rubrum</i>	Red Maple	6	2'-3' Cal., 8'-10' Ht.	B&B	AS SHOWN	Per Detail B
An	<i>Acer negundo</i>	Box Elder	15	4'-6' High	B&B	AS SHOWN	Per Detail B
**Ar	<i>Acer negundo</i>	Box Elder	6	2'-3' Cal., 8'-9' Ht.	B&B	AS SHOWN	Per Detail B
Bn	<i>Betula nigra 'Ostrya'</i>	Heritage River Birch	13	4'-8' High	B&B	AS SHOWN	Per Detail B
**Bn	<i>Betula nigra 'Ostrya'</i>	Heritage River Birch	14	8'-10' Ht., Multi-stem	B&B	AS SHOWN	Per Detail B
Co	<i>Celtis occidentalis</i>	Common Hackberry	5	4'-6' High	B&B	AS SHOWN	Per Detail A
**Co	<i>Celtis occidentalis</i>	Common Hackberry	7	2'-3' Cal., 8'-10' Ht.	B&B	AS SHOWN	Per Detail B
Cv	<i>Chionanthus virginicus</i>	White Fringe Tree	4	4'-6' High	B&B	AS SHOWN	Per Detail A
**Cv	<i>Chionanthus virginicus</i>	White Fringe Tree	2	1.5"-2" Cal., 8'-8' Ht.	B&B	AS SHOWN	Per Detail B
**CWK	<i>Crataegus viridis 'Winter King'</i>	Winter King Hawthorn	2	4'-6' High	B&B	AS SHOWN	Per Detail A
CWK	<i>Crataegus viridis 'Winter King'</i>	Winter King Hawthorn	18	2'-3' Cal., 8'-9' Ht.	B&B	AS SHOWN	Per Detail B
**Hs	<i>Hes. sp.</i>	American Holly	6	4'-6' High	B&B	AS SHOWN	Per Detail B
Io	<i>Ilex opaca</i>	American Holly	3	4'-6' High	B&B	AS SHOWN	Per Detail B
**Mv	<i>Magnolia virginiana</i>	Sweetbay Magnolia	10	4'-6' High	B&B	AS SHOWN	Per Detail A
**Mv	<i>Magnolia virginiana</i>	Sweetbay Magnolia	13	Multi-stem, 6'-7' tall	B&B	AS SHOWN	Per Detail A
**Ns	<i>Nyssa sylvatica</i>	Black Gum	4	4'-6' High	B&B	AS SHOWN	Per Detail A
**Qs	<i>Quercus nigra</i>	Water Oak	4	4'-6' High	B&B	AS SHOWN	Per Detail A
Qs	<i>Quercus phellos</i>	Willow Oak	8	2'-3' Cal., 8'-10' Ht.	B&B	AS SHOWN	Per Detail B
**Td	<i>Taxodium distichum</i>	Baldcypress	3	4'-6' High	B&B	AS SHOWN	Per Detail A

** Denotes Buffer Exemption Mitigation plantings for proposed disturbance/net increase of impervious surface within the 100' Buffer

** Denotes 10% Pollutant Offset Mitigation plantings per Critical Area Commission

SHRUBS :							
**An	<i>Amelanchier canadensis</i>	Black Chokeberry	16	18"-24" Ht.	Container	5' ON CENTER	Per Detail D
**An	<i>Amelanchier canadensis</i>	Black Chokeberry	40	12"-18" Ht., #1 Gal.	Container	5' ON CENTER	Per Detail D
An	<i>Amelanchier canadensis</i>	Black Chokeberry	17	18"-24" Ht.	B&B	5' ON CENTER	Per Detail D
Igc	<i>Ilex glabra 'Compacta'</i>	Compact Inkberry Holly	82	2'-3" Ht.	B&B	5' ON CENTER	Per Detail C
Igc	<i>Ilex glabra 'Shamrock'</i>	Shamrock Inkberry Holly	21	2'-3" Ht.	B&B	5' ON CENTER	Per Detail C
Iv	<i>Ilex virginica</i>	Virginia Sweetpire	16	3'-4" Ht.	B&B	7' ON CENTER	Per Detail C
**Mv	<i>Magnolia virginiana</i>	Male Winterberry Holly	3	12"-18" Ht., #1 Gal.	Container	5' ON CENTER	Per Detail D
Mv	<i>Magnolia virginiana</i>	Male Winterberry Holly	9	2'-3" Ht.	B&B	5' ON CENTER	Per Detail C
**MRS	<i>Magnolia virginiana</i>	Red Sprite Winterberry Holly	14	2'-3" Ht.	B&B	5' ON CENTER	Per Detail C
MRS	<i>Magnolia virginiana</i>	Red Sprite Winterberry Holly	31	12"-18" Ht., #1 Gal.	Container	5' ON CENTER	Per Detail D
MRS	<i>Magnolia virginiana</i>	Red Sprite Winterberry Holly	21	2'-3" Ht.	B&B	5' ON CENTER	Per Detail C
**S	<i>Spiraea verticillata 'Sparkleberry'</i>	Sparkleberry Winterberry Holly	47	12"-18" Ht., #1 Gal.	Container	5' ON CENTER	Per Detail D
S	<i>Spiraea verticillata 'Sparkleberry'</i>	Sparkleberry Winterberry Holly	9	3'-4" Ht.	B&B	5' ON CENTER	Per Detail C
*Lb	<i>Lindera benzoin</i>	Spice Bush	9	12"-18" Ht., #1 Gal.	Container	5' ON CENTER	Per Detail D
Lb	<i>Lindera benzoin</i>	Spice Bush	8	3'-4" Ht.	B&B	5' ON CENTER	Per Detail C
**Mp	<i>Myrica pensylvanica</i>	Bogberry	11	3'-4" Ht.	B&B	7' ON CENTER	Per Detail C
Mp	<i>Myrica pensylvanica</i>	Bogberry	22	12"-18" Ht., #1 Gal.	Container	5' ON CENTER	Per Detail D
Dm	<i>Myrica pensylvanica</i>	Bogberry	9	3'-4" Ht.	B&B	5' ON CENTER	Per Detail C
**Vd	<i>Viburnum dentatum</i>	Arrowwood Viburnum	13	12"-18" Ht., #1 Gal.	Container	7' ON CENTER	Per Detail D
**Vd	<i>Viburnum dentatum</i>	Arrowwood Viburnum	14	3'-4" Ht.	B&B	7' ON CENTER	Per Detail C
Vd	<i>Viburnum dentatum</i>	Arrowwood Viburnum	14	3'-4" Ht.	B&B	7' ON CENTER	Per Detail C
Ts	<i>Thunbergia occidentalis 'Renaissance'</i>	Everest Arborvitae	20	4'-6" Ht.	B&B	AS SHOWN	Per Detail C

** Denotes Buffer Exemption Mitigation plantings for proposed disturbance/net increase of impervious surface within the 100' Buffer

** Denotes 10% Pollutant Offset Mitigation plantings per Critical Area Commission

HERBACEOUS PLANTS:							
**Ao	<i>Aster novae-angliae 'Purple Dome'</i>	New England Aster	**20	1 Qt. Pot	COVERS 45 SQ. FT.	24" o.c.	Per Detail E
Ao	<i>Aster novae-angliae 'Purple Dome'</i>	New England Aster	85	1 Qt. Pot	24" o.c.		
**Ed	<i>Eupatorium dubium</i>	Joe-Pye Weed	**85	1 Qt. Pot	COVERS 193 SQ. FT.	24" o.c.	Per Detail E
Ed	<i>Eupatorium dubium</i>	Joe-Pye Weed	20	1 Qt. Pot	24" o.c.		
**Rf	<i>Rudbeckia fulgida 'Goldstrum'</i>	Black-Eyed Susan	**120	1 Qt. Pot	COVERS 274 SQ. FT.	24" o.c.	Per Detail E
Rf	<i>Rudbeckia fulgida 'Goldstrum'</i>	Black-Eyed Susan	45	1 Qt. Pot	24" o.c.		
**Ss	<i>Schizachyrium scoparium</i>	Little Bluestem	**115	1 Qt. Pot	COVERS 261 SQ. FT.	24" o.c.	Per Detail E
Ss	<i>Schizachyrium scoparium</i>	Little Bluestem	90	1 Qt. Pot	24" o.c.		
**SdGf	<i>Solidago sphacelata 'Golden Fleece'</i>	Dwarf Goldenrod	**150	1 Qt. Pot	COVERS 341 SQ. FT.	24" o.c.	Per Detail E
SdGf	<i>Solidago sphacelata 'Golden Fleece'</i>	Dwarf Goldenrod	85	1 Qt. Pot	24" o.c.		
**Fv	<i>Panicum virgatum</i>	Switchgrass	**1260	1 Qt. Pot	COVERS 2,864 SQ. FT.	24" o.c.	Per Detail E

** Denotes 10% Pollutant Offset Mitigation plantings per Critical Area Commission (1,750 plants spaced 24" on center cover 3,978 square feet.)

Martin O'Malley
Governor

Anthony G. Brown
Lt. Governor



Margaret G. McHale
Chair

Ren Serey
Executive Director

**STATE OF MARYLAND
CRITICAL AREA COMMISSION
CHESAPEAKE AND ATLANTIC COASTAL BAYS**

1804 West Street, Suite 100, Annapolis, Maryland 21401
(410) 260-3460 Fax: (410) 974-5338
www.dnr.state.md.us/criticalarea/

May 28, 2009

Ms. Cathy Maxwell
Department of Lane Use, Growth
Management & Environment
160 Coursewall Drive
Centreville, Maryland 21617

Re: Local Case # CU040002; Bay East Development Corp.
00 Piney Narrows Rod, Chester

Dear Ms. Maxwell:

Thank you for submitting the above-referenced conditional use and floodplain variance request. The applicant seeks to create a dredge spoils basin. The site is designated as Intensely Developed Area (IDA) and Buffer Exempt Area (BEA). The spoils basin will be located behind the 50-foot BEA setback. Based on the information provided, this office has no comment.

Sincerely,

A handwritten signature in cursive script that reads "Kate Charbonneau".

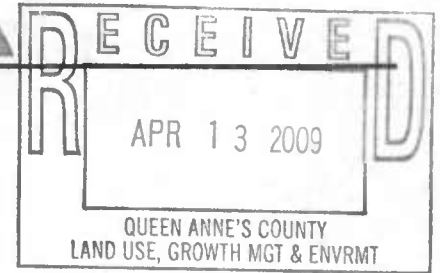
Kate Charbonneau
Regional Program Chief
QC471-05



Davis, Moore, Shearon & Associates, LLC

April 8, 2009

Mrs. Cathy Maxwell, Clerk
QA County Board of Appeals
160 Coursevall Drive
Centreville, MD 21617



**RE: PROPOSED DREDGED SPOILS DISPOSAL FACILITY LANDS OF BAY EAST
DEVELOPMENT COMPANY, KENT NARROWS, TM-57, P-429, DMS &
ASSOCIATES JOB #2009004**

Dear Cathy:

Attached please find the following information.

- ⇒ 8 Cover letters
- ⇒ 8 Applications
- ⇒ 8 Sediment & Erosion Control Plans
- ⇒ 8 Copies Previous Information
- ⇒ 2 Deeds

The Bay East Development Company proposes to develop a containment facility for the disposal of dredged spoils from work related to water dependent facilities proposed on their property and from other marine related projects in the Kent Narrows and surrounding water bodies. Although section 18:1-26B(7) of the County Code list this use as a permitted use it appears that the creation of this use in the WVC (Waterfront Village Center) zoning district in which the property is located requires conditional use approval in accord with Section 18:1-26-C-6 of the County Code. It is anticipated that the volume of spoils (fill) will exceed 600 cy and therefore we are also requesting a variance from Section 14:3-32A (1) of the County Floodplain Ordinance to place greater than 600 cy of fill on the site.

In support of the proposal for a conditional use we offer the following to address Section 18:1-94 of the County Code.

1. The use at this location is consistent with the County's Comprehensive Plan. This site has been previously used as a dredged spoils disposal site as evidenced by the previous permits issued by various regulatory agencies. This site is located in a Waterfront Village Center zoning district and marine related improvements and the disposal of dredged materials associated with the development and construction of the marine related facilities is appropriate.
2. The use at this location will not create adverse impacts on other properties in the neighborhood nor will it create adverse impacts on the general health, safety, and welfare of the county. An approved sediment & erosion control plan will be obtained for the facility.
3. The use will not impact public facilities with the exception of the public road to access the site. The public roads are adequate to provide construction access to the site and for trucks to access the site for the disposal of dredged material from remote sites that can not transport the dredged materials by water.

P.O. Box 80 Centreville, MD 21617

Phone: (443) 262-9130

Fax: (443) 262-9148

We offer the following in support of our client's request for the variance to place greater than 600 cy of fill within the 100 year flood plain:

Section 14-3-67

1) My clients are developers who have owned this mixed use zoned property for over 20 years and propose to develop the property with uses permitted in the zoning district for which the property is zoned. The entire property is encumbered by the 100 year flood plain from the tidal waters located immediately adjacent to the site. The development of the site will require fill to elevate future development of buildings to the required finished floor elevations. To facilitate import of fill to the site our clients propose to utilize dredged spoils material from water dependent facilities that they would propose on site as well as marine related projects requiring dredging of tidal water in the Kent Narrows and surrounding water bodies. Without the fill, the use of the property would be lost. We therefore believe that our clients have good and sufficient cause to request the variance.

2) A failure to obtain the variance would mean that the property would not be able to be used in accord with the zoning of the property. By not allowing greater than 600 cy of fill in the flood plain the site would be unusable.

3-i) Since the site is encumbered entirely by the 100 year flood plain it is our opinion that the fill proposed will not result in increase flood heights, will not create a threat to public safety, and will not result in any expense to the public due to the fact that the property is privately owned. The site will be provided with on site stormwater management systems to control runoff from the site in accord with the Queen Anne's County Stormwater Management Ordinance.

3-ii) The placement of this fill will not create any nuisances to adjacent landowners as the fill being placed is in an area of the site where there are no adjacent landowners other than the State of Maryland right of way which is used as a County boat launching facility and parking lot.


3-iii) The placement of this fill will not cause fraud or victimization of the public as the land in which the fill is proposed is privately owned.

3-iv) The placement of this fill will not conflict with any existing local or State laws or ordinances. The development of the property will be subject to the Queen Anne's County zoning ordinance and development review process which requires compliance with County regulations as well as State laws.

We ask that you please process this application as soon as possible. Should you have questions or need additional information please do not hesitate to call me at (443) 262-9130.

Sincerely,

DMS & Associates, LLC



Wm Thomas Davis, Jr., PE

Enclosures

Pc: George Rathlev, Bay East Development Company
Jeff Thompson, Thompson & Thompson